

20000904.qrp v01_n934.qrl.20000904

Date: Mon, 4 Sep 2000 19:03:13 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 1934

QRP-L Digest 1934

Topics covered in this issue include:

- 1) [78711] Re: Dead FT-243 XTAL Question
by "Mike Branca" <w3irz@att.net>
- 2) [78712] Re: Hmebrew QRP woes
by "Mike Branca" <w3irz@att.net>
- 3) [78713] Re: Limited Space Antennas ?
by "Bob Tellefsen" <n6wg@earthlink.net>
- 4) [78714] FOX: Another boring 1st time story
by "dwinfield" <dendav@dzdn.com>
- 5) [78715] Fox: Whoee, mighty tough chewing
by "Bob Tellefsen" <n6wg@earthlink.net>
- 6) [78716] FOX: Excellent Result!
by "Marshall Emm" <mgemm@mttechnologies.com>
- 7) [78717] FOX - withdrawal symptoms already
by n5ib@juno.com
- 8) [78718] OT: Email charges
by Royce Simmons <w2rbn@prodigy.net>
- 9) [78719] FT-243 XTAL Success
by "Gary McCaughey" <MAIL4GARY@worldnet.att.net>
- 10) [78720] Re: Dead FT-243 XTAL Question
by Lee Bahr <w5drc@earthlink.net>
- 11) [78721] SMK-1 Partially successful
by "Joe Malloy" <jmalloy@hamilton.edu>
- 12) [78722] Re: OT: Email charges
by Marty <N5NW@midsouth.rr.com>
- 13) [78723] Re: Got 'Em Both Fox Topic
by Pete Burbank <plburbank@kih.net>
- 14) [78724] Re: FT-817
by DYARNES@aol.com
- 15) [78725] Noise Blanker Needed
by "CDF" <res043pa@gte.net>
- 16) [78726] nw 20
by neil tanner <ntan@crosslink.net>
- 17) [78727] Last Call for Small Wonder Labs DSW SSB Receive Mod Group Buy Order
by "Bruce Prior" <n7rr@hotmail.com>
- 18) [78728] More on Amidon part numbers
by "Mike Czuhajewski" <wa8mcq@erols.com>
- 19) [78729] Core Color Codes

- by Lee Bahr <w5drc@earthlink.net>
- 20) [78730] Re: Station Grounding
by "Walter D Amos" <waltk8cv@surfnet.com>
- 21) [78731] RE: FT-817
by "Charles Mabbott" <crmabbott@mediaone.net>
- 22) [78732] ET Yes, Paul No
by "Damon Raphael" <w7md@azstarnet.com>
- 23) [78733] Re: FT243 Crystal
by George Gingell <k3tks@u1.abs.net>
- 24) [78734] Re: SMK-1 Partially successful
by "Mike Branca" <w3irz@att.net>
- 25) [78735] Very frustrating...
by neil tanner <ntan@crosslink.net>
- 26) [78736] New Low-IMD Mixer
by "James R. Duffey" <jamesd1@flash.net>
- 27) [78737] Re: Very frustrating...
by Steve Yates <aa5tb@yahoo.com>
- 28) [78738] Re: Very frustrating...
by n4qa@juno.com
- 29) [78739] Re: New Low-IMD Mixer
by Chris Trask <ctrask@primenet.com>
- 30) [78740] Re: Station Grounding
by bob evinger <wd9eka@arrl.net>
- 31) [78741] Fox- Final log for NW7DX hunt #17
by BenNW7DX@aol.com
- 32) [78742] Re: More on Amidon part numbers
by "Bob Tellefsen" <n6wg@earthlink.net>
- 33) [78743] Re: Very frustrating...
by "Bob Tellefsen" <n6wg@earthlink.net>
- 34) [78744] Balanced Tuners
by "Steven Weber" <kd1jv@moose.ncia.net>
- 35) [78745] Re: K2 ATU and balun saga
by "Steven Weber" <kd1jv@moose.ncia.net>
- 36) [78746] Re: Very frustrating...
by "James R. Duffey" <jamesd1@flash.net>
- 37) [78747] Re: Very frustrating...
by "Karl F. Larsen" <k5di@zianet.com>
- 38) [78748] Fox- The REAL FINAL LOG for NW7DX (sorry)
by BenNW7DX@aol.com
- 39) [78749] Re: K2 ATU and balun saga
by "Mike Yetsko" <myetsko@insydesw.com>
- 40) [78750] RE: Very frustrating...
by "Kevin Muenzler WB5RUE" <wb5rue@arrl.net>
- 41) [78751] Attention All You Foxes
by W1R0@aol.com
- 42) [78752] FOX: Worked 'em mobile
by Joe Smith <joe@joesmith.net>
- 43) [78753] Amidon cores

by Robert McAtee <w5tnj@camalott.com>
44) [78754] Re: Amidon cores
by Lee Bahr <w5drc@earthlink.net>
45) [78755] Re: Balanced Tuners
by Thomas Kuehl <ac7a@gci-net.com>
46) [78756] listen for me
by DaveLeDuc@aol.com
47) [78757] FOX: Results after hunts 17/18
by "Marshall Emm" <mgemm@mtechnologies.com>
48) [78758] Feedback Please on W6MMA's PW-1 or 40-10 Meter St. Louis Vertical
Coil
by "Kevin F. Glynn" <kfglynn@mindspring.com>
49) [78759] FOX- Everything I learned about Fox hunting I learned in...
by Lew Paceley <lew@paceley.com>
50) [78760] Re: listen for me
by "Floyd Smithberg" <flydnq7x@primenet.com>
51) [78761] Re: Balanced Tuners
by Bruce Muscolino <w6toy@erols.com>
52) [78762] QRP woes SOLVED!
by "TC Dufresne" <tdufres@radiks.net>
53) [78763] FOX: N1FN PRELIMINARY LOG FOR HUNT 20
by "Marshall Emm" <mgemm@mtechnologies.com>
54) [78764] Fox: AJ4Y Log
by Paul Womble <pwomble1@tampabay.rr.com>
55) [78765] Wanted - W9GR DSP III
by Larry East <w1hue@amsat.org>
56) [78766] (OT) Wanted -- MMX CPU
by Larry East <w1hue@amsat.org>

Date: Sun, 3 Sep 2000 18:02:44 -0500
From: "Mike Branca" <w3irz@att.net>
To: <qrp-l@Lehigh.EDU>
Subject: [78711] Re: Dead FT-243 XTAL Question
Message-ID: <002a01c015fb\$125c7e40\$43014d0c@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gary, all the other replys are interesting but after grinding hundreds of them let me suggest you do the easiest thing first. Consider that most of them were made for WW2 and they are over 55 years old so what has happened is that the rubber seal has slightly vaporized over time and has deposited itself on the crystal and the metal plates. Simply take a clean handkerchief and open the crystal holder over the handkerchief and let the 3 parts drop out. Then carefully clean the first plate with the dry

handkerchief and return it to the holder without touching it. A clean toothpick may help to position it. Then clean the crystal and the other plate the same way and re assemble the holder. Note that the plates have raised corners that contact the crystal and that it must be assembled that way or it won't work. If this does not work then use one of the cleaning methods that others mentioned. This works 95% of the time for me.

Mike Branca W3IRZ in Conyers Georgia

Date: Sun, 3 Sep 2000 18:06:22 -0500
From: "Mike Branca" <w3irz@att.net>
To: <qrp-1@Lehigh.EDU>
Subject: [78712] Re: Hmebrew QRP woes
Message-ID: <002e01c015fb\$942b1580\$43014d0c@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

TC, when I did the reverse battery thing it zapped the zener that protects my final. So the zener did double duty. Check it out.

Mike W3IRZ in Conyers Georgia

Date: Sun, 3 Sep 2000 16:30:20 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [78713] Re: Limited Space Antennas ?
Message-ID: <005801c015fe\$ed888ec0\$90d5fc9e@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Levent

Three things to consider what trying to squeeze an antenna into limited space.

1. It doesn't have to full length, ie 66-67 ft on 40m. It can be less. I'm using 55 ft dipoles on 40m, and they work just fine. Because the antenna is nonresonant, you will have to use an antenna tuner, and a balanced feedline, m like 450 ohm line, or even 300 ohm TV twinlead. Both work just fine.

2. The antenna does not have to run in a straight line. LB Cebik, W4RNL, gives a good discussion of this in his ZigZag antenna article. I think it's on his web site somewhere.

You can bend the antenna ends down vertically, or run them horizontally.

3. If you are interested in a single band, say 40m, you can use loading coils in the antenna to bring a short antenna to resonance. You could easily have a 33 ft dipole on 40m, using loading coils. This antenna could be fed with 50 ohm coax.

73, Bob N6WG

Date: Sun, 3 Sep 2000 17:31:13 -0600
From: "dwinfield" <dendav@dzdn.com>
To: "QRP-L" <QRP-L@lehigh.EDU>
Subject: [78714] FOX: Another boring 1st time story
Message-ID: <001701c015ff\$0cebd600\$c826fea9@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

First things first:

Thanks to all of the organizers, fox and hunters, and especially Marshall.
That was FUN!

Now, the rest of the story:

This was my first time actually participating in the hunt. I wasn't exactly sure I was going to bag anything, since there seemed to be a lot of QSB. I decided to give it a shot, anyway. After all, it was the last hunt for the summer, and it's usually the custom in sports to let the second string play a little. I decided to try for ET first, since I seemed to have a pipeline into FLA naturally from West Texas, and CO is always tough to work from here. At the beginning of the hunt, this theory held up, so off I went in search of ET. It's funny, but QRP pileups sound just like QRO pileups, only a little weaker. ET was doing some fast dancing, but he was in and out at no better than 339, so I waited and listened, and it finally quieted down at this end around 2045. I think my first shot got him in the rump, and he sent ?, but faded quickly. I was about to move on, when lo and behold, there is ET, at 449. Bagged him with my second shot at 2048 with about 2 watts into a vertical. Thanks, Marshall, that was great. Now, if I can only remember what I threatened the propagation gods with :-).

Off in search of Paul. What a mess. It took me almost 45 minutes to find him, there was some other pileup going on, just strong enough to be thoroughly confusing. Either the path changed or he quit, and there, just barely above the noise, is AJ4Y. I managed to squeeze off one shot, but between the QRM (we won't go there) and the QSB, I ran out of time. I just couldn't remember my last threat :-(. One out of two, I guess I had a pretty good hunt career today.

I'm looking forward to the 40 meter hunts, since Thursday is a better day for me. CU then.

72/73 es oo,

Dave, KB5MHS
Far Left Texas, DM61tv

SOC #371, Flying Pig #-109, QRP-L #2176

Date: Sun, 3 Sep 2000 16:58:19 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-l@Lehigh.EDU>
Subject: [78715] Fox: Whoee, mighty tough chewing
Message-ID: <006201c01602\$d64ead80\$90d5fc9e@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

What a way to end a season. Marshal, the infamous ET, was a pretty easy catch. Now, time to go chase Paul.

Finally found him, hiding under a carrier dead zero beat with him. Must be local, because none of the reports I've seen so far have mentioned it. Paul, for once I would have been happy to have seen you drift 100 Hz one way or the other :-)

Let's see. First line of defence, put the null of the phased array on the QRM and get rid of it. Hmmm. Not a good idea. It seems to be right in line with Paul, and there he went too.

Ok, hook up the DSP and see if I can filter the carrier out. No go, too close to zero beat. Again, lose the QRM, lose Paul.

Ah ha, get out my Datong FL-3 and use its manual notch. Maybe if I offtune

the notch, I can improve the signal to QRM ratio to where I can copy Paul.
Nope, another nonstarter.

Finally, about 10 minutes before Paul's run ended, the carrier stopped and I could hear Paul. Time for some frantic calling. Caught me a fox with two minutes to go. Yes, this Big Dawg was sweating :-)

So, for the season, I'm down 3 foxes, all due to not being able to get on the air at all due to family business. Fortunately, I was able to catch all those I actually hunted.

My hearty thanks to all who made the summer hunt such a success. I think this one is a keeper.

72 to all, and on to the Winter Hunt.

Bob N6WG

Date: Sun, 3 Sep 2000 18:07:19 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: Qrp-1@lehigh.edu
Subject: [78716] FOX: Excellent Result!
Message-ID: <39B29357.19593.D8C94@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Turned on Fox (Channel 13 here in Denver) a bit after 4pm (MDT,= 2200Z) and learned that the Redskins pulled it out and kicked some Panther butt! I had been a little worried because I had to abandon my "internet radio" connection just during the third quarter and go play fox.

That had an excellent result too, I think. Propagation was pretty good with all of the usual suspects present and accounted for and still some apparent newbies, guys I hadn't worked before (or couldn't remember).

It looks like the Summer Fox hunt was a success, and I hope it was the first of many. I know we'll all be going through "withdrawal" till the winter hunt starts, and I hope it is as much fun as this has been.

I worked Paul, AJ4Y twice (once on my frequency and once on his, where he still had many stations calling well into the second hour. And I did note that the Big Dawgs swept THIS fox, and hope the other 4 made into Paul's log-- we had a 1 point lead over the Swamp Rats going into this and I hope we held onto it!

There were a couple guys that I somehow could not convince I had already worked, and a few (maybe 3) that I called and called but just could not dig

out. But you hounds are a great bunch, well mannered, skilled, patient, or otherwise exhibiting the virtues of the true Amateur, and as usual the QRP crowd has set an example for the rest of the radio world.

My thanks to all the hounds and foxes, and the organizing committee, for a job well done!

My rough QSO count is 95 and I hope to have a draft log available by this time tomorrow.

Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

Date: Sun, 03 Sep 2000 20:13:44 EDT
From: n5ib@juno.com
To: qrp-l@Lehigh.edu
Subject: [78717] FOX - withdrawal symptoms already
Message-ID: <20000903.190954.8015.4.N5IB@juno.com>

Many thanks to all the Foxii, especially the Momma Foxii, and all the hounds as well. It was a fun summer.

Today was a split. Paul was easy, nabbed him in the first 5 minutes. But Marshall - there's another story. nary a whisper here. Once I thought I heard him near 7061.2, but never enough to copy more than a character. In fact I spent the last 115 minues listening for him, hoping the propagation fairy would sprinkle some dust my way, and only heard four or five hounds work him. I think all of those were from Florida. I did hear Paul nab him at 2159 Z. I guess the ole Gulf of Mexico helped me with Paul and those other hounds.

But not a bad season. After just 6 pelts in the winter hunt, 16 more grace the trophy room now, and my sweetie, WD5CMA, nabbed a few as well.

But, oh my, is there a patch or some gum or something I can use to ease the craving to hear CQ FOX just one more time? Don't know if I can hold out 'till October.....

72
Jim N5IB

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<http://dl.www.juno.com/get/tagj>.

Date: Sun, 03 Sep 2000 20:23:53 -0400
From: Royce Simmons <w2rbn@prodigy.net>
To: qrp-1@lehigh.edu
Subject: [78718] OT: Email charges
Message-ID: <39B2EB91.15FC@prodigy.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I realize this is way off topic but has anyone heard of a bill
in congress #602P to put a five cent charge on any Email sent or
received? Or is it another hoax?

Royce

--

Royce Simmons

Please note my new Internet ID: w2rbn@prodigy.net

Date: Sun, 3 Sep 2000 20:31:16 -0700
From: "Gary McCaughey" <MAIL4GARY@worldnet.att.net>
To: <qrp-1@lehigh.edu>
Subject: [78719] FT-243 XTAL Success
Message-ID: <000d01c01620\$97864ea0\$f1dd4d0c@garymcca>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

First, many thanks for all the replies / suggestions. To
many to thank individually.

It took careful cleaning with isopropyl alcohol to get it to
come back to life. I am now up the challenge of XTAL
rejuvenation. They are no longer sacred territory for me!!

Thanks again to all.

Gary
W2UX
Lexington, SC

CW is the REAL THING, USE IT or LOSE IT!

Date: Sun, 03 Sep 2000 15:57:31 -0500
From: Lee Bahr <w5drc@earthlink.net>
To: MAIL4GARY@worldnet.att.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [78720] Re: Dead FT-243 XTAL Question
Message-ID: <39B2BB3B.9796610F@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Open it up, keep your oily hands off the crystal disc by holding on the edges. Look for a crack, if so, it is dead. You then can't repair it. Look for someone who has rubbed lead on the sides in order to lower the frequency. If so remove with carbon tet or something like that. Too much led and there would be no activity. Clean the blank quartz with soap and water and re-install. There should be a spring in there. If not, you need one out of another crystal. Try another holder too. If the blank is not cracked due to dropping or too high current on it, it should work unless someone tried to grind it and got the two parallel surfaces not parallel. Hope this helps.
Lee Bahr w0vt

Gary McCaughey wrote:

>
> Hello QRP-L'ers,
>
> I picked up two FT-243 XTALS yesterday at a Hamfest. Both
> for exactly 7040.00 . What luck!!! I put them in my XTAL
> checker and one sings perfectly....the other appears to be
> dead. I have been a ham for 32 plus years and believe it or
> not I have never taken apart a XTAL. I always considered
> them sacred territory!! Can anything be done to rejuvenate
> it?
>
> Thanks for all the input in advance.
>
> Gary
> W2UX

> Lexington, SC
>
> CW is the REAL THING, USE IT or LOSE IT!

Date: Sun, 3 Sep 2000 20:41:37 -0400
From: "Joe Malloy" <jmalloy@hamilton.edu>
To: <qrp-1@Lehigh.EDU>
Subject: [78721] SMK-1 Partially successful
Message-ID: <000001c01608\$e1de5e10\$ce47eed8@mozart>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang, I need some help.

I was assembling my SMK-1 kit when I was rudely interrupted by the arrival of my K2 kit. Well, I finally got back to the SMK-1 and finished today. The good news: the transmitter is working FB and putting out about 270 mW according to my Ohr WM-2. My receiver is, well, uh, receiving, but so far the only signal it has heard has been my Century 21 located about two feet away -- and that wasn't exactly a 599 either!

I have a non-varying hiss in the headphones and the gain control appears to be working (at least it will vary the volume/rf of the received signal upon transmitting) but that's about it. It's pretty obvious that the AF amp is working, so the LM386 circuit is fine, I assume; the 78L06 get 13.5 in and 6.18 out, so that's good, too, I guess. So where to look? I assume the U1/Q1 area would be the place to look, does anyone have any suggestions? I'd appreciate any help at all!

Tnx!

72,

Joe, W2RBA

Date: Sun, 03 Sep 2000 20:26:19 -0500
From: Marty <N5NW@midsouth.rr.com>
To: w2rbn@prodigy.net
Cc: qrp-1@lehigh.edu

Subject: [78722] Re: OT: Email charges
Message-ID: <mgu5rs8cfvhqi6cvelep9b606ppm13gful@4ax.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

On Sun, 03 Sep 2000 20:23:53 -0400, Royce Simmons <w2rbn@prodigy.net> =
wrote:

>I realize this is way off topic but has anyone heard of a bill
>in congress #602P to put a five cent charge on any Email sent or
>received? Or is it another hoax?
>
>Royce

Hoax. Been around for years. I think the first time I got it was in =
1993.

--
Marty, N5NW

-----=

Lakeland (Memphis), Tennessee =
<http://marty.w.tripod.com/>
N5NW@midsouth.rr.com

Date: Sun, 03 Sep 2000 22:07:49 -0400
From: Pete Burbank <plburbank@kih.net>
To: <qrp-1@Lehigh.EDU>
Cc: 70511.3041@compuserve.com, n1tp@worldnet.att.net, pwomble1@tampabay.rr.com,
<Macstein@AOL.com>
Subject: [78723] Re: Got 'Em Both Fox Topic
Message-ID: <3.0.32.20000903220744.00776b7c@kih.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 05:44 PM 9/3/00 EDT, Macstein@aol.com wrote:

>In a message dated 09/03/00 4:29:19 PM EST, plburbank@kih.net writes:
>

>> Nice shootin' Doc! I think another sweep or two.
>> The QSB was MURDER!!!
>> Mac...The GO at 2125 was from me....HI!
>> 73 to all and what a great team!!!!!!
>> Pete NV4V...TNX for having me!!!
>

>The noise got me more than the QSB. but it was there too. Thanks for the

CUE

>Pete, I thought that was you... I just couldn't hear him when he would come
>back, until the sent AF4PS? (and you sent "GO"). Paul was actually harder
>than Marshall!!!

>

>Congrats guys...

>

>-MAC-

>AF4PS

>

>

This brings up something that I have often thought about. It would be fun to re-establish the CW links and signals that the original ARRL was founded on. The skills have been honed by the Foxhunts but it is frustrating to hear folks calling away but no favor from the Propagation Fairy.

Maybe we could dream up an event to foster all QTH's...etc.

I leave this to the collective massive brain of this great list.

73 Pete NV4V

To sleep...perchance to dream

Date: Sun, 3 Sep 2000 22:54:07 EDT

From: DYARNES@aol.com

To: k1nun@altavista.com, qrp-1@lehigh.edu

Subject: [78724] Re: FT-817

Message-ID: <de.97ea0b5.26e468cf@aol.com>

MIME-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

Content-Transfer-Encoding: 7bit

In a message dated 8/28/00 6:26:11 AM US Mountain Standard Time, k1nun@altavista.com writes:

<< When asked about the selling price, he said a general rule of thumb (subject to many variations) is to take the Japanese price, knock off a zero, divide by two, and add about a hundred. This gives an approximate selling price in the US. So, 110,000 Yen might translate to about \$700ish. >>

That can't be right! knocking off only one zero puts you at \$5500! Actually the exchange rate for the Yen has been around 100 to 1. It was better than that for quite a while, but it's getting down now to much closer to 100 to 1. That would suggest a starting point of around \$1100 before the other adjustments mentioned.

I don't understand the "divide by two" part or the "add \$100". Did he give you any clue as to what this was all about??? I don't know if Japan has some kind of value added tax (VAT) or what to make the gross price over there that much higher than it would be here.

I'll tell you though, we are very fortunate here in the U.S. Just about everything seems to be cheaper here than I find in most other countries, unless it happens to be made in that particular country, and even then it isn't necessarily cheaper. I just came back from a great trip to northern Europe, and there sure weren't many bargains there to speak of, except in Russia (St. Petersburg), and even then it was only for souvenirs, not anything we are interested in here.

Anyway, the new FT-817 sounds like a very interesting piece of gear, and I hope we get some price info from Yaesu pretty soon.

Dave W7AQK

Date: Sun, 3 Sep 2000 23:00:32 -0400
From: "CDF" <res043pa@gte.net>
To: "QRP-L" <qrp-l@lehigh.edu>
Cc: "Ten Tec" <tentec@contesting.com>
Subject: [78725] Noise Blanker Needed
Message-ID: <001901c0161c\$4b5c2800\$a96a1b3f@eypwdog>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello all.

I am looking for the TT #223 A Noise Blanker for my Argosy II 525 D.

If you have one that you would like to part with please email me with the price. It needs to be The A version for my radio.

Thanks

Charlie

The Truth Is Out There. This Is Who WE Are

WA8CUL QRP-L #1752
Charles D. Feigley Sr SOC #394
1516 Toledo St. TT Argosy II @ 5 W
Holiday, Florida
34690

Date: Sun, 03 Sep 2000 23:25:59 -0400
From: neil tanner <ntan@crosslink.net>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [78726] nw 20
Message-ID: <39B31647.47AF2B1A@crosslink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

greetings

Tnx for the replies regarding the dampness vs. high swr. The vertical is still touchy, but 40

works great and the dipole is fine, but am still having a problem everytime I try my homebrew

NW20. I built the rx section about 3 yrs ago and used it with a hb 20m vxo and all was ok. The

reciever is working great (after some mods). Just recently I got the parts together for the tx

section as described by w6emt. I made a mod or two (oh no!!)...instead of using a mrf472 for

the final, I decided, since I only run 1w or less to use a RCA 4013.

Instead of using the bifilar

after the final, I used a molded choke from the 12v to the collector.

Instead of the lo-pass filter

as layed out by w6emt(following the final), I just used the one from my vxo. I never had

problems with it....Anyway what happens is I tune the antenna using my Auttek RF-1 and get a

1.5--1 swr, than I switch it over to the nw20 and the swr is always high....(pwr was about 1w). I

did some tweaking and reduced the drive to about 300mw and the swr goes low but my

guess is its relative to the drive....When I listen to my signal on the yaesu, when driving a

dummy load, the signal sounds clean...when I switch to the antenna the tone is raspy, hash

like...Could my problem be the low pass filter? Any ideas would be welcomed...

Date: Mon, 04 Sep 2000 03:46:02 GMT
From: "Bruce Prior" <n7rr@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [78727] Last Call for Small Wonder Labs DSW SSB Receive Mod Group Buy Order
Message-ID: <F159DN4CxpA0AKK5LqN00001ed6@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Hi Gang --

A number of Small Wonder Labs DSW owners have ordered the inductor needed to convert DSW rigs to receive on the proper sideband to make CW/SSB cross-mode QSOs practical. Thanks to those who have also sent in their payment. I'll be placing the final group buy order on Tuesday morning September 5th and wanted to make sure that nobody got left out who missed it the first time. I will be out of town for over a week starting midday Tuesday, so I may not be able to send everybody acknowledgments before I leave. Here is the original posting:

>From: "Bruce Prior" <n7rr@hotmail.com>
>To: qrp-l@lehigh.edu
>Subject: nwq-l: DSW Mod Inductor Group Buy
>Date: Tue, 22 Aug 2000 22:42:41 GMT
>
>nwq-l DE "Bruce Prior" <n7rr@hotmail.com> BT
>
>Hi Gang!
>
>My article, "Modifying Small Wonder Labs DSW Rigs to Receive SSB," was just
>published in the September 2000 issue of CQ Amateur Radio, pages 28-29.
>The simple modification allows you to take advantage of the full band
>coverage of the DSW rigs by being able to receive SSB stations which are
>operating LSB on 80 and 40 meters and on USB on 20 meters.
>
>The modification involves installing one fixed inductor in parallel with
>trimmer capacitor C14. By the way, the 8.2-uH inductor is the best one for
>any of the DSW-20 or DSW-80 rigs, irrespective of the value of C14. (In the
>article a distinction is made between the gray 70-pF and the black 90-pF
>C14 trimmer. This is unnecessary. A 8.2-uH inductor works best with both
>trimmer types.) The 15 uH inductor is the correct one for the modification
>of the DSW-30 or DSW-40. Since the 30-m band is not normally used for
>phone, it is unlikely that DSW-30 owners would wish to change its receiving
>sideband.
>

>The hardest part is finding the inductor. I recommend a surface-mount
>style, since it is very easy to solder directly to the underside of the DSW
>board. DigiKey will be getting its inductor shipment from Delevan in about
>6 weeks. It would be more economical to do a group buy. I will handle the
>group buy for people who are interested. The cost is \$1.00 per inductor
>plus a flat \$2.00 shipping cost for any quantity to the U.S., Canada or
>Mexico, or similar \$4.00 shipping cost for elsewhere in the world.
>Washington State residents please add 7.9% sales tax.

>

>If you are interested please complete the following information and send it
>back to me (off-list, please) by e-mail, then print out your e-mail and
>enclose the print-out with your payment. Please make checks payable to
>Bruce Prior and mail them to Bruce Prior, 853 Alder Street, Blaine, WA
>98230-8030 USA

>

>Name:

>Street Address or POB:

>City:

>State/Province:

>Zip or Postal Code:

>Country:

>e-mail address:

>

>Quantity:

>

>15-uH inductor for DSW-30 or DSW-40 @ \$1.00 =

>

>8.2-uH inductor for DSW-20 or DSW-80 @ \$1.00 =

>

>Shipping to USA, Canada or Mexico: \$2.00

>Shipping to the rest of the world: \$4.00

>Washington State residents add 7.9% sales tax:

>

>TOTAL:

>

>Please allow about 8 weeks for delivery. I ll let you know via e-mail when
>I begin shipping. I will not cash your cheques until I begin shipping.

>Enjoy your cross-mode QSOs with your DSW rigs!

>

>72, Bruce Prior N7RR

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<http://profiles.msn.com>.

Date: Mon, 4 Sep 2000 00:25:40 -0400
From: "Mike Czuhajewski" <wa8mcq@erols.com>
To: <qrp-1@lehigh.edu>
Cc: <wa8mcq@erols.com>
Subject: [78728] More on Amidon part numbers
Message-ID: <001b01c01628\$2ff0ff80\$8934fea9@l8a3h1>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Whoa, this is interesting! I just got e-mail from Wes Hayward, W7ZOI, addressed to about 2 dozen people, mentioning that he had just stumbled across the "new" Amidon part numbers. I whipped off a quick reply to everyone, he thanked me, then I logged onto qrp-1 later and found everyone is talking about it there, too.

Hey, been there, done that! I made a posting on this to qrp-1 in the early part of this year and had an item on it in my Idea Exchange column in the April 2000 issue of the QRP Quarterly. Guess it's time to put out the info again!

The bottom line is that you have to be careful just where you look on the Amidon web page or you can get confused. Stick with the ham radio products part and there should be no problem. But when I checked the Amidon page today, the only thing that the amateur radio section carried was a price list and nothing else. I thought they used to have a lot of app notes, tech data, etc, but sure wasn't there today! And of course if they don't have that info in that area, you naturally start looking at other parts of their web page, and then you get into trouble :-)

I took a quick look at the web page that Chris Trask mentioned, <http://www.lodestonepacific.com/> which is a dealer handling both Fair-Rite ferrites and Micrometals powdered irons (the same products that Amidon sells). I know nothing of Lodestone Pacific, but their site does have links to both the Micrometals and Fair-Rite sites; nothing like going to the horses mouth for good info :-)

Here's what I had to say about this in the April issue of the QRP Quarterly, which is pretty much the same (I think) as I posted to qrp-1 early this year:

NEW AMIDON PART NUMBERS FOR POWDERED IRONS?

No. Let me repeat that: No. Well, not really, though this is something to

be aware of since there is the possibility for some confusion. As it turns out, they have two different part numbers for the exact same thing, depending how you order from them, but most people will probably never know it and don't need to be concerned. But just to be safe, I'll let you in on it.

I needed to order another ten year supply of the ferrite cores needed to fix bad output networks in the HW-8, and went to their web site to order online. The URL is:

<http://www.amidoncorp.com/>

I had heard that Amidon had acquired a manufacturing capability a few years ago, and now make some of their own cores in addition to being a distributor for others. The latter includes the ferrites from Fair-Rite and powdered irons from Micrometals. The familiar color code for powdered irons that we all know is actually the Micrometals code; as I've mentioned over the years, there is no such thing as an industry wide color code for powdered iron cores. It just happens that we all get our powdered irons from a few sources, mostly Amidon, and they are all made by the same company.

If you want to check out their web page, go to the section called "ham radio products" and don't look at anything else; that way, there will be no confusion. But I noticed that they have a section on the web page called Manufacturing, and under that is a section called "iron powder cores." That's where the potential confusion comes from. They now make some of their own powdered irons, and they have different part numbers. Most of the material types are identical to those we already know, but the numbers can cause some confusion. Unfortunately, they are not much different from the color code we already know; in fact, they are virtually identical, but completely scrambled up. The bottom line is that you can buy a particular type of powdered iron core from Amidon under two different part numbers.

I talked with someone at Amidon and was told that there would be no problem as long as I stuck with the "ham radio products" section. That's where we should buy our cores, and those are the same familiar products we've known for years. He indicated that the products under the other area are primarily sold to industrial users, and that they will continue to sell the Fair-Rite and Micrometals products to the hobbyist market.

It's probably unlikely that many people will even stumble on the other part numbers, and from talking to them I got the impression that if a hobbyist did try to order small quantities from that section they'd steer them over to the ham radio side. However, there's always the chance that some of these items, with their other numbering system, might one day make it into surplus channels and appear at hamfests, etc, and cause some confusion.

Here are the two numbering systems:

Traditional Industrial Color Permeability

0	00	tan	1
1	07	blue	20
2	06	red	10
3	09	gray	35
6	04	yellow	8
7	05	white	9
8	19	white-orange	35
10	02	black	6
17	23	blue-yellow	4
26	16	white-yellow	75

There are others, but this gives the most familiar ones. Imagine the confusion that could result if someone finds a bag of cores at a hamfest with an Amidon label and a part number that indicates type 07 material. We expect type 7 to be white, but these are blue, and the permeability is twice what we expect of type 7. That could cause some head scratching when someone tries to use one in a VFO. Or the number might indicate type 06 material, and we'd expect the familiar yellow core, but these would be red and identical to the type 2 we're used to. You get the picture.

There's no need to panic, and you may never see any cores with these new markings on them. With luck, all we'll ever encounter will be the same old cores we've known for years. Just don't be totally surprised if you ever come across some cores labeled as Amidon where the color and the number don't match up. You can always go to the Amidon web page (or have a friend do it, if not online yourself) and translate the number into the system we know.

[end of item in column]

In a series of e-mails between me and some people at Amidon they either hinted, or came right out and said in so many words, that since they were making some of the same things as Micrometals and selling both lines they didn't want to risk lawsuits by using the same numbering system :-)

Certainly does present some excellent potential for confusion among the customers, though.

I fired off some e-mail to Amidon today, trying to get some updated info. With luck they'll contact me this week, and I can see what the latest story is.

Hope that clears up things a little.

73 and queue our pea DE WA8MCQ

Date: Sun, 03 Sep 2000 23:56:23 -0500
From: Lee Bahr <w5drc@earthlink.net>
To: qrp-1@Lehigh.EDU
Subject: [78729] Core Color Codes
Message-ID: <39B32B77.D545CA6F@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Life is too short for all this confussion. Seems to me I'm going to go to Lodestonepacific.com and buy from them from now on. Then I can be sure I'll be getting Fair-Rite and Micrometals cores and won't have to worry about getting some off-spec stuff from Amidon's basement alchemy lab!

Lee Bahr w0vt

Date: Mon, 4 Sep 2000 05:41:13 +0100
From: "Walter D Amos" <waltk8cv@surf.free.com>
To: <jbhenson@zebra.net>
Cc: "Posts Qrp-1" <qrp-1@lehigh.edu>
Subject: [78730] Re: Station Grounding
Message-ID: <003b01c0162a\$5c8918a0\$53891b26@waltamos>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ah yes, GROUND elusive isn't it!

In a time long ago, when I worked for a living at the phone co., we had 3 grounds.

power ground

lightening ground

equipment ground

All 3 were separate and not equal.

Power ground went to the batteries in the basement.

Equipment went to a grid outside and the water pipe.

Lightening rods went to a grid outside, but not common with Equipment.

My station ground is separate from the power ground in that it goes outside to 3 ground rods 6' apart in a triangle loop all connected together and that is all. The green wire in the power plugs goes to power ground so in some equipment that may connect the two together. Problem with that, well yes, if lightening hits the power lines outside my ground may look better than there's, not likely, but possible. I unplug my equipment in a storm and when not in use. My tower and the ground plane for the ground mounted vertical connect together but not to the station ground direct. All antennas go through a metal bulkhead in the basement window which is connected to the tower ground and they can be disconnected inside where it is nice and dry. Same with outside control cables to the rotor and remote coax switch, they use Jones plugs in the basement. No matter what you do if you suffer a direct hit you will be lucky to save the house. That's what insurance is for.

Walt Amos K8CV Royal Oak, MI k8cv@arrl.net

----- Original Message -----

From: "Jay Henson" <jbhenson@zebra.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Sunday, September 03, 2000 23:48

Subject: Station Grounding

> Hello to the group,

>

> I have followed the short thread on station grounding very closely. In fact, I changed my grounding configuration to that of a star, as recommended

> by several on the list. My rig, tuner, PC, and power supply meet at a point and that point feeds to the station ground. In my case, that is the utility ground rod.

>

> Question: Comments have been made that the station ground should NOT be the

> utility ground rod. I read the comments several times and I still am not sure of the reason. Is this a SAFETY issue? A local code issue?

>

> I took the time to read the chapter in the 1999 handbook on safety (station

> grounding) and it says a lot but does not address this. In fact, the handbook says that all grounds (DC, RF and lightning) need to be connected.

> In my case, the utility ground rod is located just outside the shack window
> (approx 10 or so feet from the rig). Should I drive another ground rod as
> the station ground (DC), connect counterpoises (RF ground) and connect it to
> the utility ground (DC ground)? My station protection for lightning is to
> not be connected to the antenna at all. This ignores the possibility that
> lightning could come into my home via power lines/cable TV/telephone.
>
> In other words, am I as safe as I think I am? The last thing that I want to
> do is to let the smoke out of my K2. I need all of the mojo I can keep.
>
> Thanks for any help. Have a VERY SAFE holiday.
> See you on the radio.
> Jay
> AJ4AY Mobile, AL
> QRP-L #1372 ARCI #8131 SOC#220 FP#115
>
>
>
>
>
>

Date: Mon, 4 Sep 2000 01:41:26 -0400
From: "Charles Mabbott" <crmabbott@mediaone.net>
To: <qrp-l@Lehigh.EDU>
Subject: [78731] RE: FT-817
Message-ID: <000001c01632\$c4a99d80\$0201a8c0@mw.mediaone.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

When I was in Japan at the end of '98 the Yen to dollar was
\$1.00 to 112.3 Yen. So the way I calculate based on the
number given is \$979.52 which is a little higher than the
figures of \$900 to \$950. that had been said before.

A little pricey for me!
Chuck Mabbott AA8VS

Isn't it interesting of the three Rs we
learned about in School, two of them do not

start with 'R'. Did you ever wonder how this started?

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of DYARNES@aol.com

Sent: Sunday, September 03, 2000 10:54 PM

To: Low Power Amateur Radio Discussion

Subject: Re: FT-817

In a message dated 8/28/00 6:26:11 AM US Mountain Standard Time, k1nun@altavista.com writes:

<< When asked about the selling price, he said a general rule of thumb (subject to many variations) is to take the Japanese price, knock off a zero, divide by two, and add about a hundred. This gives an approximate selling price in the US. So, 110,000 Yen might translate to about \$700ish. >>

Dave W7AQK

Date: Sun, 3 Sep 2000 22:53:00 -0700

From: "Damon Raphael" <w7md@azstarnet.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [78732] ET Yes, Paul No

Message-ID: <000701c01634\$635b1d40\$4422c5a9@virgo>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

The ongoing saga of busted 6-el 20 came to a jarring end today but there is a new ray of hope for the short term.

Working QRO before the FoxHunt today I had worked a station in Chagos (Diego Rivera) on CW and was attempting to nail down 8Q7XX in the Maldives on 15 meter phone. I made the mistake of motoring the tower higher. I worked the Maldives dude but snapped the rotor cable which was birdnested up top in the twisted aluminum of the 20 meter antenna; so my 17 to 10 meter yagi is now permanently fixed on the Indian Ocean where the foxes don't work CW.

I was able to work Marshall with some difficulty but Paul in FL was off the side of the beam. I could hear him in and out as he rotated his C3 but could not break the pileup.

I have the St Louis Vertical which was delivered to me by Vern Wright, W6MMA at Ft Tuthill, so I braved the AZ heat and desert to try and get the St Louis going in time to work Paul, AJ4Y but kept trying with the mal-pointed yagi intermittently and unsuccessfully. I got it up about 15 min after the hunt ended but with a poor match because I had made the radials too short. Might have made it in time but I dropped the little gold center pin from the BNC connector never to be found and had to tear my junk box apart to find another BNC.

Finished an hour later with a good match using an AEA HF Analyst. Went out to dinner with the family and came back to try it out. Heard ES1WN calling CQ and called him with the K2 running 5 watts. He answered me but could not get my call correct. Increased power to 10 watts and completed the QSO. Good start for the ST Louis and Vern's nice 10 to 80 meter coil.

Now to get my tower and antennas straightened out for the autumn DX peak. Really enjoyed the challenge of QRP with the Foxhunts and looking forward to some mo'

73,

Damon, W7MD

Tucson, AZ

Date: Mon, 4 Sep 2000 06:20:52 -0400 (EDT)
From: George Gingell <k3tks@u1.abs.net>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [78733] Re: FT243 Crystal
Message-ID: <Pine.BSF.4.21.0009040606100.4823-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I see you have already been given lots of good advice on the care and cleaning of Quartz. Just to add a couple of more. Lay the Rock down on a flat surface And make sure you use the correct size Phillips or Reed and Prince Screwdriver. It is good to put a cloth under the Crystal and make sure to apply a good bit of pressure as you start to unscrew the small screws. If you don't apply enuff pressure, you will booger up the screws. They are soft and Have been in there about 40 years in most cases.

I also use a tee shirt or other soft cotton cloth on the table. Just in case you drop something :^)

As mentioned by one of the others, Make sure you keep track of the order of assembly. There are steel plates on either side of the rock with slightly raised dimples on one side of them. That side goes next to the crystal. They are the pressure plates. Only the dimples touch the rock. Slowly remove the outer cover or you will lose the Pressure spring.

Even if the Rock is Busted, All is not lost. You can drill two holes in the top and Install a couple of Machined Pins from a dip socket and make a nice adapter for HC6 or other wire leaded crystals.

There are also some very small Osc ckts that will fit inside for a real QRP rig. :^)

Of Course, you will also have gained some valuable knowledge for the next time..

Sir George, The First :^)

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net

QRP A.R.C.I. Net Manager and Board of Director Member.

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Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -

Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Date: Mon, 4 Sep 2000 08:29:25 -0500

From: "Mike Branca" <w3irz@att.net>

To: <qrp-l@Lehigh.EDU>

Subject: [78734] Re: SMK-1 Partially successful

Message-ID: <009c01c01674\$25a8a2c0\$43014d0c@default>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Joe, it doesn't look like anyone answered your request but there have been a lot of problems that other folks had with the mute circuit. The fet must

conduct on RX and can be tested by shorting same. Also check out the diode driving the fet.

Mike W3IRZ

Date: Mon, 04 Sep 2000 10:26:19 -0400
From: neil tanner <ntan@crosslink.net>
To: "qrp-l@Lehigh.EDU" <qrp-l@Lehigh.EDU>
Subject: [78735] Very frustrating...
Message-ID: <39B3B10A.ABF5D1E5@crosslink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Man, I have tried everything to get this thing right (my HB NW20)....Never had such a frustrating time with the other homebrew rigs....why is it that when I test the rig into a 50 ohm dummy load, all looks great....as soon as I switch it over to the antenna which is tuned to about a 1.5-1 according to my RF-1, the swr shoots up....I tried tweaking the antenna tuner...nothing....still high....I tried shielding the tx board, the only thing I haven't tried is using the low-pass w6emt describes instead of the one I used with my 20m vxo...which never had problems with strange swr.....am not sure what a ground loop is but is this a classic ground loop problem? HELP>>>!!! Neil wa4chq

Date: Mon, 04 Sep 2000 09:04:52 -0600
From: "James R. Duffey" <jamesd1@flash.net>
To: <qrp-l@lehigh.edu>
Subject: [78736] New Low-IMD Mixer
Message-ID: <B5D91633.258D%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

QRP-L's own Chris Trask, N7ZWY-the dinosaur signature guy, has an article in the September 2000 Electronics World entitled "A New Low-IMD Mixer". Chris uses feedback to reduce the distortion of our old friend the Gilbert cell mixer. The new Gilbert/Trask mixer is the one that he discussed in RF Design a couple years back. The ubiquitous NE602 and MC1496 use the Gilbert cell mixer, so the article should be of widespread interest.

If you are interested in how Gilbert cell mixers work, there is a good

tutorial worth reading included. Trask's modification of the Gilbert Cell mixer is straight forward and easy to follow. Measured performance is much better in terms of both third order intercept and 1 dB compression point than the conventional Gilbert cell mixer and a diode double balanced mixer, the SBL-1. The price paid for the improved performance is additional complexity compared to the Gilbert cell mixer or the diode balanced mixer. It is interesting that the performance given by Trask for the Gilbert cell is quite a bit better than the 602 in terms of third order intercept, and quite a bit worse in terms of gain.

Trask provides enough information in the article to duplicate his mixer. There are no exotic parts and the active devices recommended are the CA3102 or CA3054 transistor arrays. However, his design is for a transmitter application and the use of the terms RF and IF are reversed from those normally used in receiver applications. That is, what he has labeled as IF in his mixer is normally the incoming RF signal in a receiver, and what he has labeled as RF is usually what goes to the IF in a receiver. At least that is what my copy of "Solid State Design" shows for Gilbert cell mixers.

Chris alludes to possible future implementation as a MMIC, so we may have a new part to play with in the future!

The article is worth reading if you have a technical bent and are interested in active mixer design. Electronics World, a British publication, is available at good technical libraries and larger news stands. Even if you don't use the design, reading the article will help you understand how the Gilbert cell mixer works. - Dr. Megacycle KK6MC/5

--

James R. Duffey KK6MC/5
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Mon, 4 Sep 2000 08:10:00 -0700 (PDT)
From: Steve Yates <aa5tb@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78737] Re: Very frustrating...
Message-ID: <20000904151000.24794.qmail@web3005.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Neil,

Your transmitter may have a spurious emission that is occurring at some far removed frequency.

When you transmit into a 50 ohm dummy load the "SWR" is good at all frequencies.

Your antenna is probably only has a SWR of 1.5:1 at the frequency that you are trying to operate at. The SWR at the spurious frequency may be much higher.

As far as fixing the problem try tuning around on another receiver while transmitting to see if you kind find the spurs. Another kink is that sometimes the spurious signals won't even be present until you connect a real antenna with a complex impedance at various frequencies. A spectrum analyzer would come in handy about now :-)

You may try to tweak the output stages of the transmitter while the antenna is connected. When the spurious signal is eliminated the SWR should go back down.

The high power mod for the NORCAL 38 Special was bad about having spurs at about +/- 100kHz if the board wasn't mounted over a ground plane, such as a metal chassis. The same phenomena as you describe would occur.

Maybe other NC20 users recognize this problem and can tell you exactly what to do.

Good luck.

=====

73,
Steve Yates - AA5TB
Fort Worth, TX - EM12gs
<http://www.geocities.com/aa5tb>
aa5tb@arrl.net

Do You Yahoo!?
Yahoo! Mail - Free email you can access from anywhere!
<http://mail.yahoo.com/>

Date: Mon, 4 Sep 2000 11:41:21 -0400
From: n4qa@juno.com
To: qrp-l@Lehigh.EDU
Subject: [78738] Re: Very frustrating...
Message-ID: <20000904.114125.-85845.0.n4qa@juno.com>

MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Hi, Neil.

Sounds like there is a lot of spurious freq energy coming out of your xmtr.

The dummy load, of course, cares not what freq is applied to it (within its specs), but the antenna does. Got scope ?... the instrument...not the mouthwash :) Better yet, a spectrum analyzer will show you what's coming out of the rig, in a hurry.

The thing is definitely unstable for some reason.... could be one or more of a lot of things.

Undesired coupling, inappropriate drive level etc.

Good luck and 73,

Bill, N4QA

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<http://dl.www.juno.com/get/tagj>.

Date: Mon, 4 Sep 2000 08:42:58 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>
To: "James R. Duffey" <jamesd1@flash.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78739] Re: New Low-IMD Mixer
Message-ID: <Pine.BSI.3.96.1000904082745.19783A-1000000@usr01.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

James,

Thanks for the review. You can find more on my progress with feedback mixers on my web page at:

<http://www.primenet.com/~ctrask>

I have PDF versions of my professional papers there, and there will be more to come.

Yes, these feedback mixers do have less gain than a comparable Gilbert cell. The NE602 does not have any emitter degeneration in the voltage-to-current converter pair which gives it the highest possible gain, but at the same time gives it the worst possible intermodulation performance.

I have gone much further with the intermodulation performance with subsequent designs, one of which was presented at ISCAS 2000 this last May. And there are others yet to come. However, the remaining frontiers of NF (noise figure) and IIP2 (second-order distortion) are to be dealt with. I have a patent pending for the NF solution, and have recently started to address the IIP2 problem, which is a real headache for direct conversion receivers that are becoming more popular for wireless communications.

Chris Trask
N7ZWY

On Mon, 4 Sep 2000, James R. Duffey wrote:

> QRP-L's own Chris Trask, N7ZWY-the dinosaur signature guy, has an article in
> the September 2000 Electronics World entitled "A New Low-IMD Mixer". Chris
> uses feedback to reduce the distortion of our old friend the Gilbert cell
> mixer. The new Gilbert/Trask mixer is the one that he discussed in RF Design
> a couple years back. The ubiquitous NE602 and MC1496 use the Gilbert cell
> mixer, so the article should be of widespread interest.

>

> If you are interested in how Gilbert cell mixers work, there is a good
> tutorial worth reading included. Trask's modification of the Gilbert Cell
> mixer is straight forward and easy to follow. Measured performance is much
> better in terms of both third order intercept and 1 dB compression point than
> the conventional Gilbert cell mixer and a diode double balanced mixer, the
> SBL-1. The price paid for the improved performance is additional complexity
> compared to the Gilbert cell mixer or the diode balanced mixer. It is
> interesting that the performance given by Trask for the Gilbert cell is
> quite a bit better than the 602 in terms of third order intercept, and quite
> a bit worse in terms of gain.

>

> Trask provides enough information in the article to duplicate his mixer.
> There are no exotic parts and the active devices recommended are the CA3102
> or CA3054 transistor arrays. However, his design is for a transmitter
> application and the use of the terms RF and IF are reversed from those
> normally used in receiver applications. That is, what he has labeled as IF
> in his mixer is normally the incoming RF signal in a receiver, and what he
> has labeled as RF is usually what goes to the IF in a receiver. At least
> that is what my copy of "Solid State Design" shows for Gilbert cell mixers.

>

> Chris alludes to possible future implementation as a MMIC, so we may have a
> new part to play with in the future!

>

> The article is worth reading if you have a technical bent and are interested
> in active mixer design. Electronics World, a British publication, is

around
their buildings, but they also have a rather unique situation(thousands
of miles
of copper coming into one point :))that makes their methods possibly
safer
for them. The star arrangements matches to some extent what I have been
told and seen with TelCO's.

Concerning seperate ground rods. I am pretty sure that the National
electric code
states that all rods are supposed to be connected together and this
needs to be
done solidly. Either welded or some other good mechanical connection.

I would like to relate an incident that happened to me 2 years ago here.
I moved
into a new sectional. I placed a ground rod under the house under the
breaker box before the home was moved in. The utility power for the
house
was grounded at this point. The power was also grounded at the meter
about
150 feet away. This was at the recomenndation of the power company.

I drove a seperate ground rod for the shack about 40 feet from the rod
under the house. All my 12 volt and radio equipment was grounded to the
shack
ground along with the phone line ground, my intention was to keep all AC
devices on the power ground. All was well for about a year, then 2
years ago
had a tstorm come through, I had all my antennas disconnected but still
took
a pretty hard hit. It wiped out one computer(the one that was plugged
into the
phone line), my 40Amp Solar/wind charge controller, and my ohr explorer.

The explorer turned out to be a shorted diode at the power jack, the
reverse
polarity protection. REplaced the diode and the rig has been fine
since.
The charge controller turned out to be a minor problem that Trace
ENGINEERING
fixed under warranty. After analyzing the damage, I came to the
realization
of what I had read about grounds. Part of the reason that they are
supposed to
be bussed together is that a nearby strike(which this was) induces
ground currents.
That current comes flowing around and hits rod #1, sees a lower

impedance path in
the rod and attached devices(all copper) and flows through the house
wiring
and re-enters the earth at ground rod #2 possibly frying lots of stuff
in the
process I was lucky in that the damage was not super severe even though
I
lost one computer.

I thought I had isolated all equipment from the two grounds and that
nothing was
shared. I had only radio equipment and 12 volt/inverter operated
appliances on
that rod. WHat I forgot though was that I had an answering machine
plugged into
commercial power, this also got zapped if I remember. I believe what
happened was it came in one rod passed through my ground system the
voltage
spike on the ground side was enough to blow the diode on the power of
the
Explorer and nail my charge controller and computer(via telco) and then
exited out the other rod. I have since physically bussed all the ground
rods at/under the house and have had no further problems in many similar
storms. The damage happened the first summer that I had put the 2 rod
system
at the house end in place.

Something to keep in mind before you isolate your grounds.

bob

Jay Henson wrote:

>
> Hello to the group,
>
> I have followed the short thread on station grounding very closely. In
> fact, I changed my grounding configuration to that of a star, as recommended
> by several on the list. My rig, tuner, PC, and power supply meet at a
> point and that point feeds to the station ground. In my case, that is the
> utility ground rod.
>
> Question: Comments have been made that the station ground should NOT be the
> utility ground rod. I read the comments several times and I still am not
> sure of the reason. Is this a SAFETY issue? A local code issue?
>
> I took the time to read the chapter in the 1999 handbook on safety (station
> grounding) and it says a lot but does not address this. In fact, the
> handbook says that all grounds (DC, RF and lightning) need to be connected.

> In my case, the utility ground rod is located just outside the shack window
> (approx 10 or so feet from the rig). Should I drive another ground rod as
> the station ground (DC), connect counterpoises (RF ground) and connect it to
> the utility ground (DC ground)? My station protection for lightning is to
> not be connected to the antenna at all. This ignores the possibility that
> lightning could come into my home via power lines/cable TV/telephone.
>
> In other words, am I as safe as I think I am? The last thing that I want to
> do is to let the smoke out of my K2. I need all of the mojo I can keep.
>
> Thanks for any help. Have a VERY SAFE holiday.
> See you on the radio.
> Jay
> AJ4AY Mobile, AL
> QRP-L #1372 ARCI #8131 SOC#220 FP#115

--
Bob Evinger WD9EKA Marshall, Illinois
If Guns Cause Crime, Then Matches Cause Arson.

Date: Mon, 4 Sep 2000 12:03:23 EDT
From: BenNW7DX@aol.com
To: qrp-l@lehigh.edu
Subject: [78741] Fox- Final log for NW7DX hunt #17
Message-ID: <25.a6ceb08.26e521cb@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hello -

I would like to thank everyone once again for the wonderful time I had
as a fox. The summer fox committee did an excellent good job running the
whole thing and the whole season went very smoothly. Hopefully there will be
more summer fox hunts to come!

Below is my final log for the dual hunt last Thursday.

73,
Ben - NW7DX
=

2000 Summer Dual Foxhunt NW7DX

Time	Call worked	Sent	Rcvd	Name	Qth	NR/PWR
----	-----	----	----	----	----	-----
0100	K0EVZ	559	589	DOC	ND	861

0101	NK7M	559	579	BOB	AZ	271
0101	K5LN	559	559	BILL	TX	1794
0102	K5AAR	559	559	DON	OK	1512
0103	K6VNX	559	579	ARLEN	CA	5w
0104	N5TW	559	559	TOM	TX	1474
0104	W5YR	559	559	GEO	TX	1373
0105	AJ4Y	559	579	PAUL	FL	1795
0106	N5IW	559	559	DAVE	TX	1718
0107	W7ILW	559	559	HOWARD	AZ	2010
0109	N1TP	559	559	TOM	FL	1317
0109	K5OI	559	559	TIM	NM	73
0110	K5DI	559	599	KARL	NM	2195
0111	AF5Z	559	559	BOB	TX	984
0111	AJ4AY	559	559	JAY	AL	1372
0112	W9UQB	559	599	MIKE	AZ	413
0113	K5ZTY	559	559	BILL	TX	473
0114	NK6A	559	599	DON	CA	1517
0115	KM5VY	559	589	TOM	NM	1592
0115	W0CH	559	559	DAVE	MO	618
0116	AF4PS	559	579	MAC	FL	704
0117	NN5B	559	559	JERRY	TX	5w
0118	N5ZE	559	559	LEW	TX	2178
0119	AA7EQ	559	559	BOB	AZ	2186
0121	VE7SL	559	559	STEVE	BC	769
0122	K8CV	559	559	WALT	MI	935
0123	K8ZT	559	559	ANTHONY	OH	453
0124	K8BBM	559	569	DAVE	NE	1549
0124	KC1FB	559	559	JIM	CT	29
0124	N1FN	559	559	ET	CO	153
0125	K2ZN	559	569	AL	NY	2234
0126	KG4BIG	559	559	KEN	KY	1974
0126	KK5LD	559	559	DAN	TX	2052
0127	W6BAB	559	589	HARVEY	CA	5w
0127	NV4V	559	559	PETE	KY	1721
0128	N4ROA	559	559	DAN	NC	970
0129	K1QM	559	559	JOEL	MA	337
0130	N8IE	559	559	DAN	OH	1404
0130	WS4S	559	559	CONARD	TN	993
0131	W8DIZ	559	559	DIZ	OH	1998
0131	N9AW	559	559	JERRY	WI	1271
0132	KB1ENS	559	559	JOHN	VT	2150
0133	AB8DF	559	559	ED	MI	1444
0134	K9IUA	559	559	KEVIN	ND	384
0135	AA5UN	559	559	MARTY	TX	5w
0135	N5IB	559	559	JIM	LA	1913
0136	N0UR	559	559	JIM	MN	799
0136	N9SE	559	559	MARTY	IN	1w
0137	AG0T	559	559	TODD	ND	2211

0142	K3NY	559	599	NICK	MD	1927
0143	K5BGB	559	589	ROD	TX	2231
0145	W7MD	559	559	DAMON	AZ	2190
0146	K7Q0	559	599	CHUCK	AZ	1
0146	K5TR	559	559	GEO	TX	5w
0150	N3WT	559	579	JOHN	MD	4w
0152	WA0SXV	559	599	MIKE	NM	1w
0154	W7/JR1NKN	559	559	ZU0	WA	5w
0157	N1TM	559	559	TOM	CT	1w
0158	VA6RF	559	559	EARL	AB	1076
0202	W2XN	559	559	FRED	FL	1728
0204	NR1DX	559	529	DAVE	NH	5w
0204	WJ1R	559	559	LARRY	CO	2137
0205	NK9G	559	559	RICK	WI	2061
0206	VE5RC	559	229	BRUCE	SK	886
0208	AE9F	559	559	DAN	CA	5w
0211	KB7WW	559	559	ART	OR	290
0215	W1R0/7	559	599	JIM	NV	2208
0218	W5YW	559	559	MIKE	LA	5w
0219	W7HQJ	559	559	JOHN	WA	5w
0220	KA5T	559	559	LARRY	TX	89
0223	AF4LQ	559	579	MIKE	KY	1395
0223	W0RW	559	599	PAUL	CO	1284
0227	KB7N	559	599	MARK	WA	2w
0229	K8XF	559	559	MIKE	FL	5w
0231	KI0RB	559	599	VINCE	CO	1283
0233	W3ERU	559	559	WES	MD	2179
0235	WD5CMA	559	559	GLORIA	LA	5w
0237	KA1DDB	559	559	MIKE	MI	2064
0238	N0TK	559	559	DAN	CO	4w
0238	N0TU	559	599	STEVE	CO	911
0238	W7QC	559	579	STEVE	WA	900mw
0239	VE5VA	559	559	PETE	SK	46
0243	WB0HQV	559	559	JIM	MO	2100
0244	W4EEX	559	569	SARA	KY	2w
0245	W7VP	559	599	BILL	WA	5w
0246	KI0II	559	599	RON	CO	928
0251	W7HLO	559	599	DALE	WA	3w
0252	K4LKL	559	559	LARC	FL	2226
0259	AB7MY	559	559	GARY	AZ	571
xxxx	NW7DX	559	559	ben	wa	1892

Date: Mon, 4 Sep 2000 09:16:04 -0700

From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [78742] Re: More on Amidon part numbers
Message-ID: <002801c0168b\$6d6e8a40\$eaafb3d1@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks for the post, Mike. Toroids are such a fundamental part for us today that I can just feel a slight sense of panic if the coding gets screwed up. I doubt if many hams have the means to measure or at least derive the characteristics of an unknown toroid yet.
73, Bob N6WG

Date: Mon, 4 Sep 2000 09:22:46 -0700
From: "Bob Tellefsen" <n6wg@earthlink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [78743] Re: Very frustrating...
Message-ID: <002c01c0168c\$5c8c3960\$eaafb3d1@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Neil
Try listening to your 2nd and 3rd harmonics. They may be high. When you transmit into a dummy load, everything is absorbed, both fundamental and harmonics. Into an antenna or antenna tuner, only the fundamental gets passed readily, and the harmonic energy comes back as reflected power. The swr meter isn't frequency sensitive, so it can't tell the fundamental from the harmonic energy.

I suspect you need to review your PA output circuit. I think you also mentioned that at lower power the hi reflected power went away. That suggests overdriving the PA and more harmonic generation.

Hope this gives you some troubleshooting ideas, Neil.
73, Bob N6WG

Date: Mon, 4 Sep 2000 11:56:32 +0000

From: "Steven Weber" <kd1jv@moose.ncia.net>
To: qrp-1@lehigh.edu
Subject: [78744] Balanced Tuners
Message-ID: <200009041632.MAA21332@wolf.ncia.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

I was thumbing through some old QST's recently and found a nice balanced tuner design I'd like to build some day. The issue is at home and can't remeber the title or M/Y of the QST, but it's from just a few years ago.

Anyway, it uses an air wound coax choke balun between the rig and tuner. The coax balun then connects to a pair of ganged variable inductors and a tuning cap is placed between the ends of the inductors, usually at the feed end for high impedance loads, or on the balun side for low impedance loads.

Only problem is, the variable inductors cost \$50.00 a piece! Then you have to gang them together with some gears and belts. I'm thinking of trying a cruder version with tapped coils and rotory switches. Most likely, not nearly as good as the continuesly variable inductors, but probably good enough to get a decent match.

72,
Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

Date: Mon, 4 Sep 2000 11:56:31 +0000
From: "Steven Weber" <kd1jv@moose.ncia.net>
To: myetsko@insydesw.com
Cc: qrp-1@lehigh.edu
Subject: [78745] Re: K2 ATU and balun saga
Message-ID: <200009041632.MAA21343@wolf.ncia.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Mike,

If you have, or can find a dead computer monitor, they have at least one, some times up to three large ferite cores in them. You have to hack 'em off the cable that goes to the computer. The power cord usually goes through another. The limited tests I did with 'em showed

they work good at HF.

72,

Steve, KD1JV in the white Mountains of New Hampshire
"melt solder"

Date: Mon, 04 Sep 2000 10:33:31 -0600
From: "James R. Duffey" <jamesd1@flash.net>
To: <ntan@crosslink.net>, qrp-l <qrp-l@lehigh.edu>
Subject: [78746] Re: Very frustrating...
Message-ID: <B5D92AFA.2594%jamesd1@flash.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Neil - It sounds like you are getting a parasitic oscillation on a frequency that is removed from 20 M. Both Steve and Neil commented on this. The nonresistive load of the antenna causes the final to oscillate. The dummy load looks OK.

It will be difficult to troubleshoot this without knowing the exact schematic or layout. I would suggest that you use W6EMT's low pass network instead of the one you use on the VXO. Filters are designed for specific input and output impedances and EMT's is probably designed for the final you are using and your design is not. If the final sees a wierd impedance from your network, it could oscillate. Presumably the one EMT designed is stable with his amplifier impedances.

Overdriven amplifiers are often prone to oscillation, so you might reduce the drive to see if this helps.

Poor grounding practice can cause lots of problems, including parasitic oscillations. Building a circuit over a groundplane such as is done in ugly or Manhattan style construction helps here. I don't know what your design looks like.

It will be difficult to do much troubleshooting without knowing what frequency the oscillation is occuring on. A spectrum analyzer or oscilloscope will help immensely. If you don't have eiher of these, you can listen for spurious emissions on a general coverage receiver. Old timers used to use an absorption wavemeter to look for parasitics, and you could look in an old handbook to find out how to build one. Many grid dip meters have provisions for using them as a wavemeter.

Some designers include a ferrite bead or resistor in the base lead to the driver to reduce the gain at VHF and prevent oscillations.

I hope that this helps. Let us know how it all turns out. - Dr. Megacycle
KK6MC/5

--

James R. Duffey KK6MC/5
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Mon, 4 Sep 2000 10:44:59 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: neil tanner <ntan@crosslink.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78747] Re: Very frustrating...
Message-ID: <Pine.LNX.4.10.10009041041001.767-100000@cannac.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

If your NW20 works fine into a dummy load there is nothing wrong with it rf wise. I'm surprised that you can only get a 1.5-1 SWR with a antenna tuner. I Always get 1-1 with my MFJ. I borrowed a NW20 and it worked just fine on both of my antenna using the tuner to achieve 1-1 SWR.

So I think your problem is in the tuner/antenna system. Look there for a cure.

On Mon, 4 Sep 2000, neil tanner wrote:

> Man, I have tried everything to get this thing right (my HB
> NW20)....Never had such a frustrating time with the other homebrew
> rigs....why is it that when I test the rig into a 50 ohm dummy load, all
> looks great....as soon as I switch it over to the antenna which is tuned
> to about a 1.5-1 according to my RF-1, the swr shoots up....I tried
> tweaking the antenna tuner...nothing....still high....I tried shielding
> the tx board, the only thing I haven't tried is using the low-pass w6emt
> describes instead of the one I used with my 20m vxo...which never had
> problems with strange swr.....am not sure what a ground loop is but is
> this a classic ground loop problem? HELP>>>>!!! Neil wa4chq
>
>
>

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Mon, 4 Sep 2000 13:02:17 EDT
From: BenNW7DX@aol.com
To: qrp-1@lehigh.edu
Subject: [78748] Fox- The REAL FINAL LOG for NW7DX (sorry)
Message-ID: <d.984ca4d.26e52f99@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Oops, I screwed up... somehow in my transferring from the draft log to the final log, I accidentally deleted NQ7X Floyd's QSO. Ok, here is the REAL Final Log below!!

73 and thanks Floyd for the quick response!
~ Ben

==

2000 Summer Dual Foxhunt NW7DX

Time	Call worked	Sent	Rcvd	Name	Qth	NR/PWR
----	-----	----	----	----	----	-----
0100	K0EVZ	559	589	DOC	ND	861
0101	NK7M	559	579	BOB	AZ	271
0101	K5LN	559	559	BILL	TX	1794
0102	NQ7X	559	559	FLOYD	AZ	343
0102	K5AAR	559	559	DON	OK	1512
0103	K6VNX	559	579	ARLEN	CA	5w
0104	N5TW	559	559	TOM	TX	1474
0104	W5YR	559	559	GEO	TX	1373
0105	AJ4Y	559	579	PAUL	FL	1795
0106	N5IW	559	559	DAVE	TX	1718
0107	W7ILW	559	559	HOWARD	AZ	2010
0109	N1TP	559	559	TOM	FL	1317
0109	K5OI	559	559	TIM	NM	73
0110	K5DI	559	599	KARL	NM	2195
0111	AF5Z	559	559	BOB	TX	984
0111	AJ4AY	559	559	JAY	AL	1372
0112	W9UQB	559	599	MIKE	AZ	413
0113	K5ZTY	559	559	BILL	TX	473
0114	NK6A	559	599	DON	CA	1517
0115	KM5VY	559	589	TOM	NM	1592

0115	W0CH	559	559	DAVE	MO	618
0116	AF4PS	559	579	MAC	FL	704
0117	NN5B	559	559	JERRY	TX	5w
0118	N5ZE	559	559	LEW	TX	2178
0119	AA7EQ	559	559	BOB	AZ	2186
0121	VE7SL	559	559	STEVE	BC	769
0122	K8CV	559	559	WALT	MI	935
0123	K8ZT	559	559	ANTHONY	OH	453
0124	K8BBM	559	569	DAVE	NE	1549
0124	KC1FB	559	559	JIM	CT	29
0124	N1FN	559	559	ET	CO	153
0125	K2ZN	559	569	AL	NY	2234
0126	KG4BIG	559	559	KEN	KY	1974
0126	KK5LD	559	559	DAN	TX	2052
0127	W6BAB	559	589	HARVEY	CA	5w
0127	NV4V	559	559	PETE	KY	1721
0128	N4ROA	559	559	DAN	NC	970
0129	K1QM	559	559	JOEL	MA	337
0130	N8IE	559	559	DAN	OH	1404
0130	WS4S	559	559	CONARD	TN	993
0131	W8DIZ	559	559	DIZ	OH	1998
0131	N9AW	559	559	JERRY	WI	1271
0132	KB1ENS	559	559	JOHN	VT	2150
0133	AB8DF	559	559	ED	MI	1444
0134	K9IUA	559	559	KEVIN	ND	384
0135	AA5UN	559	559	MARTY	TX	5w
0135	N5IB	559	559	JIM	LA	1913
0136	N0UR	559	559	JIM	MN	799
0136	N9SE	559	559	MARTY	IN	1w
0137	AG0T	559	559	TODD	ND	2211
0142	K3NY	559	599	NICK	MD	1927
0143	K5BGB	559	589	ROD	TX	2231
0145	W7MD	559	559	DAMON	AZ	2190
0146	K7QO	559	599	CHUCK	AZ	1
0146	K5TR	559	559	GEO	TX	5w
0150	N3WT	559	579	JOHN	MD	4w
0152	WA0SXV	559	599	MIKE	NM	1w
0154	W7/JR1NKN	559	559	ZUO	WA	5w
0157	N1TM	559	559	TOM	CT	1w
0158	VA6RF	559	559	EARL	AB	1076
0202	W2XN	559	559	FRED	FL	1728
0204	NR1DX	559	529	DAVE	NH	5w
0204	WJ1R	559	559	LARRY	CO	2137
0205	NK9G	559	559	RICK	WI	2061
0206	VE5RC	559	229	BRUCE	SK	886
0208	AE9F	559	559	DAN	CA	5w
0211	KB7WW	559	559	ART	OR	290
0215	W1R0/7	559	599	JIM	NV	2208

0218	W5YW	559	559	MIKE	LA	5w
0219	W7HQJ	559	559	JOHN	WA	5w
0220	KA5T	559	559	LARRY	TX	89
0223	AF4LQ	559	579	MIKE	KY	1395
0223	W0RW	559	599	PAUL	CO	1284
0227	KB7N	559	599	MARK	WA	2w
0229	K8XF	559	559	MIKE	FL	5w
0231	KI0RB	559	599	VINCE	CO	1283
0233	W3ERU	559	559	WES	MD	2179
0235	WD5CMA	559	559	GLORIA	LA	5w
0237	KA1DDB	559	559	MIKE	MI	2064
0238	N0TK	559	559	DAN	CO	4w
0238	N0TU	559	599	STEVE	CO	911
0238	W7QC	559	579	STEVE	WA	900mw
0239	VE5VA	559	559	PETE	SK	46
0243	WB0HQV	559	559	JIM	MO	2100
0244	W4EEX	559	569	SARA	KY	2w
0245	W7VP	559	599	BILL	WA	5w
0246	KI0II	559	599	RON	CO	928
0251	W7HLO	559	599	DALE	WA	3w
0252	K4LKL	559	559	LARC	FL	2226
0259	AB7MY	559	559	GARY	AZ	571
xxxx	NW7DX	559	559	ben	wa	1892

Date: Mon, 4 Sep 2000 13:12:36 -0400
 From: "Mike Yetsko" <myetsko@insydesw.com>
 To: <kd1jv@moose.ncia.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
 Subject: [78749] Re: K2 ATU and balun saga
 Message-ID: <00a301c01693\$552ba0a0\$0600a8c0@dad>
 MIME-Version: 1.0
 Content-Type: text/plain;
 charset="iso-8859-1"
 Content-Transfer-Encoding: 7bit

Actually I'm 'working' right now. Yesterday I made contacts in NC, NY, Idaho (as well as others), and heard LA and NM stations.

Until I get a time when there's consistant band openings up through 10M to A/B against, I won't know for sure how bad what I have really is.

Then again, I may take the rig to work, and rig up an RF voltmeter or just hook direct to the scope, and see what goes out the balanced side....

But just 'working' is tolerable. Making up the RIGHT balun is the ultimate goal!

Mike

Date: Mon, 4 Sep 2000 12:19:59 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@arrl.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [78750] RE: Very frustrating...
Message-ID: <000001c01694\$5b532380\$033cc6d8@wb5rue>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Am excellent idea Bob. Put a dummy on that sucker, key down and listen. The fundamental should be extremely strong, S9+20 and the harmonics should certainly be "hearable."

73/72

Kevin, WB5RUE

> -----Original Message-----
> From: owner-qrp-l@Lehigh.EDU
> [mailto:owner-qrp-l@Lehigh.EDU]On Behalf Of
> Bob Tellefsen
> Sent: Monday, September 04, 2000 11:23 AM
> To: Low Power Amateur Radio Discussion
> Subject: Re: Very frustrating...
>
>
> Neil
> Try listening to your 2nd and 3rd harmonics. They may be high.
> When you transmit into a dummy load, everything is absorbed, both
> fundamental and harmonics. Into an antenna or antenna tuner, only the
> fundamental gets passed readily, and the harmonic energy comes back as
> reflected power. The swr meter isn't frequency sensitive, so
> it can't tell
> the fundamental from the harmonic energy.
>
> I suspect you need to review your PA output circuit. I think you also
> mentioned that at lower power the hi reflected power went away. That
> suggests overdriving the PA and more harmonic generation.
>

> Hope this gives you some troubleshooting ideas, Neil.
> 73, Bob N6WG
>
>

Date: Mon, 4 Sep 2000 14:02:34 EDT
From: W1R0@aol.com
To: qrp-1@lehigh.edu
Subject: [78751] Attention All You Foxes
Message-ID: <15.8c933c4.26e53dba@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I'd just like to thank all of you Foxes for your dedications and a job well done!!!

Having missed several hunts while on vacation, I made up for it by catching the last to hunts. C U on 40 meter hunts!

Thanks again!
72/3
Jim
W1R0/7
Lost in Vegas

Date: Mon, 4 Sep 2000 13:24:36 -0500 (CDT)
From: Joe Smith <joe@joesmith.net>
To: qrp-1@lehigh.edu
Subject: [78752] FOX: Worked 'em mobile
Message-ID: <Pine.LNX.4.10.10009041319180.25810-1000000@nikola.joesmith.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well I think I got both foxes yesterday. I was riding along co-pilot with K5ALU after working on a superstation in Northern Arkansas. Worked on hardline yesterday to the 10-meter and 15-meter tower. Man was it HOT!

I hope to work some hunts from down there this winter. 40 meter antenna will eventually be a 3 element monobander at 120 feet! That ought to put out a good qrp signal.

We were just south of Branson, MO. yesterday when I caught the fox, but N1FN dropped into some bad line noise. I worked about 10 foxes last year while running down the highway mobile. It is fun!

72,
W0JOE

"To invent, you need a good
imagination and a pile of junk."
- Thomas Alva Edison

Date: Sun, 03 Sep 2000 20:50:03 -0500
From: Robert McAtee <w5tnj@camalott.com>
To: qrp-1@Lehigh.EDU
Subject: [78753] Amidon cores
Message-ID: <3.0.3.32.20000903205003.007d4d30@mail.camalott.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

That's interesting Eric. Just how do you determine the permeability of the cores you obviously tested????? ==Mac== AG5F Abilene, TX.
Eric wrote.....

Amidon is now making many of their own powdered cores instead of buying them from Micrometals. We have found that their cores vary widely in permeability from those made by Micrometals. As a result we now only buy Micrometals cores for our projects.

73, Eric WA6HHQ

Date: Mon, 04 Sep 2000 13:59:37 -0500
From: Lee Bahr <w5drc@earthlink.net>
To: w5tnj@camalott.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78754] Re: Amidon cores
Message-ID: <39B3F119.783BB681@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wind 10 turns on a bunch of cores. If they are wound the same way they should all give the same inductance. Who cares what the permeability is for this test. If Micrometals gives a close bell shaped curve in the sample and Amadon does not or gives another curve far removed from the Micro Metals curve, da, what does this tell you?
Lee Bahr w0vt

Robert McAtee wrote:

>
> That's interesting Eric. Just how do you determining the permeability
> of the cores you obviously tested????? ==Mac== AG5F Abilene, TX.
> Eric wrote.....
> Amidon is now making many of their own powdered cores instead of
> buying them from Micrometals. We have found that their cores vary
> widely in permeability from those made by Micrometals. As a result
> we now only buy Micrometals cores for our projects.
>
> 73, Eric WA6HHQ

Date: Mon, 04 Sep 2000 11:58:24 -0700
From: Thomas Kuehl <ac7a@gci-net.com>
To: kd1jv@moose.ncia.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78755] Re: Balanced Tuners
Message-ID: <39B3F0D0.F3983C4@gci-net.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Steven,

A few years ago, I attempted to construct an unbalanced L-match tuner using a tapped inductor and rotary switch arrangement. It was my expectation that the usual 11 or 12 tap rotary switch wouldn't provide enough fine inductance steps with a inductor (coil) intended to cover a range of 160 through 10 meters, or even 80 through 10 meters; not unless the taps were set for a specific transmission line and antenna combination. So to that end, I hunted for a rotary switch with many taps and eventually found a Shallcross Mfg. rotary switch that had 47 taps! My thought was that should provide more than enough taps for most any coil, and allow sufficient inductance resolution for most any load.

An Amidon T-200-2 core was employed as the coil and wound with 47 turns. Each turn, in turn, was then connected to a tap. A large, multi-section air variable was connected such that it could be applied to the transmitter end

or load end. This simple combination formed the L-match.

To make a long story short, the results were disappointing. A number of loads were tested but in most cases the tuner was incapable of providing a 1:1 match. In fact, an SWR below 1.5 or even 2.0 was often difficult to acquire. I wouldn't have expected this to be the case, but I suspect that is why the commercially produced L-match products use a continuously variable inductor. The exact inductance value, required for the conjugate match, can be dialed in precisely.

It is well known that rotary inductors are low "Q" devices and are responsible for most of a tuner's loss. Therefore, because of this loss and their high cost, it is desirable to find an alternate solution. A possibility that comes to mind is placing a large capacitance, variable capacitor in series with the tapped inductor. This technique has appeared in both Ham Radio and 73 magazines. Equally applicable should be a smaller capacitor (100 pF? max.), shunted across the inductor. The LC combination would provide a wide range of "inductor" adjustment. A down-side of this approach is the two-knob L-match now has three knobs, and the coils and capacitors would have to be ganged for a balanced configuration. You would be looking at using 4 variable capacitors that would have to be coupled to each other, in pairs. The inductors would have to be identical; if not, the balance would suffer. That may be a problem.

Another approach, which I've considered, is a balanced T-match configuration: a mirrored T-match. Since most T-match tuners use a tapped-coil / rotary switch configuration, this would just be an adaptation of the unbalanced circuit. The same comments about the inductors and capacitors apply here as well.

Probably the easiest solution is to go with the ever popular Z-match, which so many folks here on QRP-L use. Although a high-Q tuner, it is a 2-knob tuner, and offers a fairly wide impedance matching range, while providing the balance you seek.

Best Regards, Thomas - AC7A (Tucson)

Steven Weber wrote:

> Only problem is, the variable inductors cost \$50.00 a piece! Then you
> have to gang them together with some gears and belts. I'm thinking of
> trying a cruder version with tapped coils and rotory switches. Most
> likely, not nearly as good as the continuesly variable inductors, but
> probably good enough to get a decent match.
>
>
> 72,

> Steve, KD1JV in the white Mountains of New Hampshire
> "melt solder"

Date: Mon, 4 Sep 2000 15:15:25 EDT
From: DaveLeDuc@aol.com
To: qrp-1@lehigh.edu
Subject: [78756] listen for me
Message-ID: <5e.3db186.26e54ecd@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

If you happen to be around 40, 20 or 15 meters give a listen for K1EPJ or a
callsign reasonably similar. I am recovering from a stroke and think that the
cw will make a big difference. My code is kind of slow with plenty of errors.
73 Dave k1epj

Date: Mon, 4 Sep 2000 13:17:51 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-1@lehigh.edu
Subject: [78757] FOX: Results after hunts 17/18
Message-ID: <39B3A0FF.17608.43D0F0@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Hi, Guys--

The results for hunts 17 (WJ1R) and 18 (NW7DX) have been posted on the web site
at <http://www.cqc.org/sfox> .

I'll append them here for the "web disadvantaged."

Still recovering from yesterday's hunt so the draft log is only half-typed, but
I hope to have it up later today.

73
Marshall (ET), N1FN

18 out of 18 ...PERFECT SCORE
AE9F
AJ4Y
K0EVZ

17 out of 18

K6VNX

N1FN

NW7DX

VA6RF

W7ILW

WJ1R

16 out of 18

K5DI

N4ROA

N5TW

NK7M

15 out of 18

AF4PS

AJ4AY

K5AAR

N1TP

N5IB

NQ7X

W0CH

WA7SPY

14 out of 18

K5OI

KA1DDB

N6WG

W5YR

13 out of 18

K7TQ

N5ZE

NV4V

W5YW

WD5CMA

12 out of 18

AF5Z

K1QM

KC1FB

N0UR

VE5RC

VE5VA

VE7SL

11 out of 18

AA7EQ
AF4LQ
K7QO
N6MM
NK6A
W7QQQ
W8DIZ
WS4S

10 out of 18

K5LN
K9IUA
KG4BIG
N5IW
W2XN
W7MD

9 out of 18

AA5UN

8 out of 18

AG0T
K8CV
KB7WW
KI0II
KM5VY
N9AW
NM5M

7 out of 18

KA5T
KB1ENS
N0RC
N8IE
NK9G
WB8RCR

6 out of 18

AB8DF
AF4PP
K2ZN
K5DW
K5ZTY
KA9TXE
KF2P
KK5LD
W4EN
W4NJK

W6BAB

5 out of 18

K3NY
K5JHP
K5TR
K8ZT
KB9BVN
N4SO
N5FC
N5GJQ
W0AV
W6ABC
W9UQB
WB0HQV

4 out of 18

K0CO
K0FRP
K5BGB
K5EOA
K5UP
KI0RB
KK6MC
N5GLQ
N7CQR
N9SE
NN5B
VA7NT
W0RW
W3CD
WB6JBM

3 out of 18

AB0CD
K0PC
K1CL
K4LKL
KE1LA
KU7Y
N1ODL
N4HAY
N6NU
VE5QRP
VE6JAZ
VE9GM
W0HEP
W1RO

W3ERU
W4EEX
WA0SXV
WZ2T

2 out of 18

AA0B
AA0ZZ
AC7AC
AC7CF
AD6JY
AE2T
AK1P
JR1NKN
K0SQ
K0YO
K1JD
K1MG
K4AVX
K4LL
KB7MBI
KB7N
KD6VIO
KD7CTF
KF2DA
KG4IKQ
KK7GG
KQ5U
KU4AF
N0TK
N0TU
N1TM
N7XY
NA6E
VE3ZBU
W0UFO
W1II
W1XT
W5JAY
W6ZH
W7VP
W8RU
WB5QYT
WD9IFF
WE7G

1 out of 18

AA6AV

AA8IV
AA9IV
AB0GO
AB7MY
AC4HF
AC7AX
AE4MU
AE9K
AF4S
F5JD
HP1AC
K0EPK
k0QD
K0ZK
K1LOG
K4AO
K4GZZ
K5AX
K5KW
K5PSH
K6III
K6WG
K7FD
K7UD
K8BBM
K8XF
KA0ERU
KA8LLE
KB2SWY
KB6FPW
KC5MC
KC5NT
KD7AEE
KD7KTF
KF6RMK
KG7PV
KI0MZ
KM4LS
KN6YD
KQ0I
KR5C
KT3A
KW7D
KX3X
N0AR
N0MF
N0RZ
N1KI

N1TR
N1YJ
N2CQ
N3LAZ
N3WT
N5IG
N5JI
N5MX
N5NF
N5UW
N6GA
N6TUU
N6XU
N8ME
N8NRG
N9BOR
N9QIL
NC9O
NF0R
NI0A
NP3D
NR1DX
NT2A
PY2CWS
SM4BNK
SM4MWJ
VE3JC
VE3VRA
VE3VX0
VE7BGP
W1CFI
W2APF
W2KJ
W4SI
W4WLG
W6ASH
W6CJ
W7
W7AQK
W7HLO
W7HQJ
W7HR
W7QC
W8HRQ
W9DYG
WA4DOU
WA4GIJ
WA6HZY

WA8BXN
WA8KOQ
WA9PWP
WB5GWB
WB8YYY
WD4OJY
WQ0RP
WT6P

Hounds allocated: 265
QS0s allocated: 1223

Call	1st	2nd	Total
------	-----	-----	-------

K0EVZ	69	42	111
-------	----	----	-----

AE2T	63	76	139
------	----	----	-----

N5TW	68	75	143
------	----	----	-----

WJ1R	53	88	141
------	----	----	-----

W8RU	56	77	133
------	----	----	-----

N4ROA	63	60	123
-------	----	----	-----

N0UR	73	75	148
------	----	----	-----

K7Q0	30	0	30
------	----	---	----

N1FN	92	0	92
------	----	---	----

NW7DX	72	91	163
-------	----	----	-----

Total QS0s: 1223

Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

Date: Mon, 4 Sep 2000 15:33:43 -0400
From: "Kevin F. Glynn" <kfglynn@mindspring.com>
To: <njqrp@njqrp.org>, <qrp-1@Lehigh.EDU>
Subject: [78758] Feedback Please on W6MMA's PW-1 or 40-10 Meter St. Louis Vertical Coil

Message-ID: <000d01c016a7\$0a2f5ec0\$2a19f7a5@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi gang,

I bet this has been asked before, but if you own one of Vern W6MMA's PW-1 or 40-10 Meter St. Louis Vertical coil please reply with your feedback. I'm experimenting with portable/simple antennas using raised radials and am considering one of these too.

Please reply direct and I'll then post a message to the lists. Thanks for the help, it's appreciated.

72 Kevin N2T0
Brooklyn, NYC
kfglynn@mindspring.com

Date: Mon, 04 Sep 2000 15:53:25 -0500
From: Lew Paceley <lew@paceley.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78759] FOX- Everything I learned about Fox hunting I learned in...
Message-ID: <014501c016b2\$2c15f480\$0332a8c0@roland.swbell.net>
MIME-version: 1.0
Content-type: text/plain; charset="iso-8859-1"
Content-transfer-encoding: 7bit

...this years' 20m fox hunts. What an absolutely great time it has been. The final two "doubles" matches were an especially good ending for the season. It was real mind bender to try and predict who would be stronger/when and then find out how wrong I was.

I'd also like to add a special thanks to Marshall/N1FN, Tom/N1TP, Doc/K0EVZ, Mike/K1MG, and Bruce/VE5RC for their "behind the scenes" work to pull all the infrastructure together. And thanks again to all the foxes...you each did a terrific job. Encore!

In the spirit of the title, here's ten things I learned this season in no particular order:

- 1) Use the best antenna you can....more (antennas) is better
- 2) Maximize your success by pointing your antenna pattern at the Fox (see #1)

- 3) Have a NVIS antenna/plan for those nearby Foxen (see #1)
- 4) Band noise can sometimes be awful...really narrow filters can help
- 5) A super-sensitive, low noise, receiver is a terrific asset but is not a strict necessity
- 6) There will be times when every milliwatt appears to count....eliminate loss
- 7) Propagation/QRN/QRM happens...smile at the vagaries of life
- 8) Don't give up - work the full 2 hours...you never know when conditions will change
- 9) The "post game" QRP-L reports are part of the fun, too..share your experiences
- 10) Learn something new every hunt...and use the knowledge to improve.

When the season began I was wondering whether my modest shack was "competitive" enough to participate. For this season I used an old TS820S (power reduced to 5W out) with 500 Hz CW filter into a half-sized G5RV at 28'. I have power lines about 15' off one end of the antenna. Very late in the season, I augmented my G5RV/2 with a 20m dipole at 17'. And while I didn't score in the winners circle this season, I did manage to have a lot of fun collecting a barnful of pelts. As any experienced fisherman will tell you, if you want to catch fish you've got to put your line in the water ;-)

72/73,
Lew
N5ZE

PS - My 17' dipole pointed at CO finally ended my Colorado Fox drought...I got Marshall yesterday and Paul! Thanks guys!

Date: Mon, 4 Sep 2000 14:07:48 -0700
From: "Floyd Smithberg" <flydnq7x@primenet.com>
To: "QRP-L Message" <qrp-l@Lehigh.edu>, <DaveLeDuc@aol.com>
Subject: [78760] Re: listen for me
Message-ID: <001001c016b4\$4e5fcf00\$e1ae30d0@primenet.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Better yet....specify a time and freq. I'm sure find plenty of takers. Good Luck, 72
Floyd NQ7X Phoenix,AZ ScQRPion DM33uq
----- Original Message -----

From: <DaveLeDuc@aol.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Monday, September 04, 2000 12:15 PM
Subject: listen for me

> If you happen to be around 40, 20 or 15 meters give a listen for K1EPJ or
> a
> callsign reasonably similar. I am recovering from a stroke and think that
> the
> cw will make a big difference. My code is kind of slow with plenty of
> errors.
> 73 Dave k1epj
>

Date: Mon, 04 Sep 2000 17:10:53 -0400
From: Bruce Muscolino <w6toy@erols.com>
To: ac7a@gci-net.com
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [78761] Re: Balanced Tuners
Message-ID: <39B40FDD.37AF@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tom,

You didn't make a rotary inductor, you made a switched inductor. In fact the tuner you tried to duplicate is sold by MFJ as the 16060. It works very well and has the additional advantage of being completely reversible! I have used one for 20+ years. I also have duplicated it using a T-200-2 core and a 365 uF variable capacitor. Both have worked well.

The primary problem with small tuners, in my view, is their small size. There is way too much electrical interference between the components and the case!

73

Date: Sun, 3 Sep 2000 16:47:25 -0500
From: "TC Dufresne" <tdufres@radiks.net>
To: <qrp-1@Lehigh.EDU>

Cc: <tdufres@radiks.net>
Subject: [78762] QRP woes SOLVED!
Message-ID: <003f01c015f0\$8de05ec0\$76f31dce@server>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang:

In the continuing saga of Tom versus QRP rig, we find our hero (Tom) stupidly reverses polarity from battery to rig, and promptly blows rig!

Our hero is frustrated, he knows how long it took him to get the darn thing right. Undaunted, he starts trouble shooting. OK, power to oscillator, rig still has tone from that circuit. Oh oh, no power to PA tho! OK, check traces (See? I am learning!) Traces are blown! Fix traces..Power up.. popping noise noted, hmm, traces blown again.. Fix traces... After doing this a few times, our hero decides something is not right... Goes to QRP-L and asks for help. Several much smarter than our hero shake their heads, in understanding. "Been there-Done that" they say. "Gotta protect that rig from RP" (reverse polarity I find out). Someone says that the finals could be blown. Dollar signs dance in our hero's head. (Hey, MRF 472's go for about 5 bucks these days! This rig has two! hehe I know what you are thinking.. Wow! POWER!!)

Anyway, the long and short of it.. I replace the blown diode, the one that protects my PA from open (tested with my trusty Sears battery powered multimeter (diode checker included!) and fire 'er up. Hmm, no popping sounds, lets give 'er a check with the handy dandy NJQRP RF meter. Oops, make sure the dummy load is connected. I'm shaking a bit! Ok, positive to positive this time Tom! Hmm, cool! yup, RF meter says I'm pushing out about 3.5 watts agn. Great! Lets see if our hero can make some QSO's! Cool! "wattmeter" on trusty MFJ 941E says 3 watts, maybe a bit more.. Sounds about right...15 meters sounds pretty clear. Fire up the mighty oscillator on about 21.059mHz. Hmm, sounds good. Well, lets give a "CQ" and see what happens....Whoa! a N1 station returns my call. Have to change the trusty Radio Shack DX-389 I'm using as a receiver from high to low sideband, but there he is, and yes, that's _my_ call back to me! Great! I got him in the log! Doesn't it feel good to say "RIG IS HOMEBRU QRP XMITTER" and get back "FB SIGS ON UR HOMEBRU TOM"? It does for me! Well, gotta try somemore... Wow! here come my call agn, this time from a KK7 station.. Hey! QRZ.COM says thats in Seattle, Washington! hehehe this QRP stuff ain't too bad!!! Wow, more calls the rest of the day. Love the spotter button, just listen for the sigs and match my oscillator with his sigs. Is that what "zero beating" is? I wonder. Well, it works for me! Not bad for a homebrew, Tom!

I thank the folks at QRP-L and wonder if I still have time today to tackle that Pixie project I've been seeing. You know, the one where they boosts 'er

up from about 250 milliwatts to almost 5 watts? Now thats a rig, huh? And it has a transceiver too! And what about all those 40 meter xtals I still have? Well, shoot, those will work just FB in the old Pixie rig! So what am I waiting for, you ask? Well, someone is calling CQ on 15 meters, about 21.060 MHz.. Lets see if I can reel him in!

Oh, BTW, can someone explain in newbie language exactly HOW to prevent this from happening agn? Somnething to do with a fuse and a diode, I understand.....

Much thanks to all
de KCOGXX
Tom dit dit

Date: Mon, 4 Sep 2000 16:04:22 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: Qrp-l@lehigh.edu
Subject: [78763] FOX: N1FN PRELIMINARY LOG FOR HUNT 20
Message-ID: <39B3C806.15826.DC4D66@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Wow, what a mess-- lots of dupes and broken Q's and while I though I had counted correctly yesterday I have come up with about 3 fewer Qs than I thought I had. Interestingly, the total is now 92, which is exactly the same as I had on my Thursday evening run.

Since it was the last hunt of the season I cleaned it up and have not included the dupes and missed Q's this time. Aslo, I transcribed it myself without "calling it over" so there are likely to be a few typos-- please advise as soon as you can if you exchange looks wrong.

Thanks to all the hounds who claimed a pelt from me, and especially those who did it for the first time! And to those who didn't quite make it-- please don't get discouraged-- try again in the next hunt. This is a crap shoot at the best of times and your luck is bound to change.

It's been a lot of fun and I hope we can do it again next year.
FER NW 72 DE ET
(Marshall), N1FN
--

QRP-L Summer 20M Fox Hunt Log
Hunt Number 15, 0100-0259Z 25AUG00
Fox: N1FN, ET, Aurora CO
Rig: OHR500

Ant: Gap Titan vertical, 40M doublet, low 20M dipole

TIME(Z)	STATION	RST	SPC	NAME	NUM/PWR
2000	K0EVZ	559	ND	DOC	861
2001	K1QM 559	MA	JOEL	337	
2001	KB7WW	559	OR	ART	290
2002	NW7DX	599	WA	BEN	1892
2003	W9PWP	579	WI	PAUL	129
2003	K5DI 579	NM	KARL	2195	
2003	KA1DDB	559	MI	MIKE	2064
2004	K5AAR	559	OK	DON	1512
2005	VE7SL	579	BC	STEVE	769
2005	NQ7X 559	AZ	FLOYD	343	
2006	VE5RC	559	SK	BRUCE	886
2007	VE5VA	559	SK	PETE	46
2007	N5ZE 559	TX	LEW	2178	
2008	AB0CD	559	CO	DICK	483
2009	N5TW 559	TX	TOM	1474	
2009	WA7SPY	559	CA	GLENN	2214
2010	K5JHP	559	TX	BILL	825
2011	K5ZTY	559	TX	BILL	173
2012	AA5UN	559	TX	MARTY	5W
2012	W5YR 559	TX	GEO	1373	
2013	KC1FB	559	CT	JIM	29
2013	NK6A 559	CA	DON	1517	
2014	VA6RF	579	AB	EARL	1076
2015	K5OI 559	NM	TIM	73	
2016	N9SE 559	IN	MARTY	5W	
2016	N6WG 559	CA	BOB	26	
2017	W7ZOI	559	OR	WES	4W
2018	N7XY 569	WA	BOB	1985	
2019	NK7M 579	AZ	BOB	271	
2020	KG4BIG	559	KY	KEN	1974
2020	AE9F 559	CA	DAN	5W	
2020	N6NU 559	CA	ANDY	5W	
2021	K9IUA	559	ND	KEVIN	384
2022	AF4LQ	559	KY	MIKE	1395
2023	K7TQ 559	ID	RANDY	102	
2023	KB1ENS	559	VT	JOHN	2150
2024	W7MD 559	AZ	DAMON	2190	
2024	W7ILW	559	AZ	HOWARD	2010
2025	W0CH 559	MO	DAVE	617	
2026	K8CV 559	MI	WALT	935	
2027	K6VNX	579	CA	ARLEN	5W
2027	W2RBA	559	NY	JOE	4W
2030	K5LN 559	TX	BILL	1794	
2030	W4NJK	559	CA	CHARLIE	2075
2031	K0FRP	559	CO	AL	366

2031	WJ1R	559	CO	LARRY	2137
2032	AA7EQ	559	AZ	BOB	2186
2034	AF5Z	559	TX	BOB	984
2039	KD5CMN	559	TX	MIKE	1328
2040	N4ROA	559	VA	DAN	970
2040	WB0JNR	559	CO	ROGER	1W
2042	AG0T	559	ND	TODD	1W
2043	KK7GG	559	OR	MIKE	1705
2047	KB5MHS	449	TX	DAVE	2176
2048	N5GLQ	559	LA	MIKE	5W
2050	WA4QDM	559	VA	JOHN	5W
2050	AA2MT	539	NY	CONNIE	5W
2054	AJ4Y	559	FL	PAUL	1795
2057	KA8LLE	559	OH	BEN	3W
2105	N7CEE	559	AZ	BRUCE	1692
2105	N5IW	559	TX	DAVE	1718
2108	KB3CRT	559	PA	ROB	5W
2110	WS4S	559	TN	CONARD	993
2110	W1HUE	559	ID	LARRY	228
2112	KA4LBD	559	TN	LOUIS	100W
2113	KC7TUP	559	ID	DICK	5W
2114	N0UR	559	MN	JIM	799
2116	N1TP	559	FL	TOM	1317
2116	NV4V	339	KY	PETE	1721
2117	KW3U	339	PA	JIM	690
2123	W0HEP	559	CO	RICH	5W
2124	AF4PS	559	FL	MAC	704
2124	W0CQC	559	CO	RICH	5W
2125	W2XN	559	FL	FRED	1728
2126	W3BBO	339	PA	BOB	5W
2132	W0CP	559	CO	WALT	5W
2133	K5QLF	559	TX	FRED	5W
2137	NR0NR	559	CO	GENO	5W
2140	K5UP	559	OK	GLEN	21
2141	N7CQR	559	OR	DAN	502
2142	W6BAB	559	CA	HARVEY	5W
2143	N1ODL	339	MA	ARON	1326
2145	AJ4AY	559	AL	JAY	1372
2146	N3WT	559	MD	JOHN	4W
2148	W0JOE	559	MO	JOE	1901
2149	W0HEM	559	CO	ELAINE	5W
2151	W2ZGB	559	CO	GABE	221
2153	NA1XX	559	MA	MIKE	1588
2154	W4EN	559	NJ	ED	2216
2156	NK9G	559	WI	RICK	2061
2159	AE2T	559	NY	AL	1664
2200	N1FN	559	CO	FOX	9999

Marshall Emm, N1FN
Milestone Technologies, Inc.
(303) 752-3382
<http://www.mtechnologies.com>

Date: Mon, 04 Sep 2000 18:09:42 -0400
From: Paul Womble <pwomble1@tampabay.rr.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [78764] Fox: AJ4Y Log
Message-ID: <39B41DA6.D36216C1@tampabay.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks again everyone...see you in the 40m hunt.

band	time	callsign	rst	qth	nr	qth	name	nr/pwr
20CW	2001	KG4BIG		559 FL	1795	KY	Ken	1974
20CW	2002	K5AAR		559 FL	1795	OK	Don	1512
20CW	2003	KC1FB		559 FL	1795	CT	Jim	29
20CW	2003	K0EVZ		559 FL	1795	ND	Doc	861
20CW	2005	NV4V		559 FL	1795	KY	Pete	1721
20CW	2006	N5IB		559 FL	1795	LA	Jim	1913
20CW	2009	AJ4AY		559 FL	1795	AL	Jay	2121
20CW	2010	AA5UN		559 FL	1795	TX	Marty	5W
20CW	2011	VE5RC		559 FL	1795	SK	Bruce	886
20CW	2012	K5DI		559 FL	1795	NM	Karl	2195
20CW	2012	N5TW		559 FL	1795	TX	Tom	1474
20CW	2013	NQ7X		559 FL	1795	AZ	Floyd	343
20CW	2014	W5YW		559 FL	1795	LA	Mike	5W
20CW	2015	N5ZE		559 FL	1795	TX	Dave	5w
20CW	2016	W5YR		559 FL	1795	TX	Geo	1373
20CW	2017	K5JHP		559 FL	1795	TX	Bill	825
20CW	2019	W2XN		559 FL	1795	FL	Fred	1728
20CW	2020	WD40JY		559 FL	1795	VA	Jim	2134
20CW	2022	K1QM		559 FL	1795	MA	Joel	317
20CW	2025	KA1DDB		559 FL	1795	MI	Mike	2064
20CW	2027	WS4S		559 FL	1795	TN	Conrad	993
20CW	2027	AF5Z		559 FL	1795	TX	Bob	984
20CW	2028	NK7M		559 FL	1795	AZ	Bob	271
20CW	2030	W0CH		559 FL	1795	MO	Dave	618
20CW	2031	K8CV		559 FL	1795	MI	Walt	835
20CW	2032	WD5CMA		559 FL	1795	LA	Gloria	5W
20CW	2034	W7ILW		559 FL	1795	AZ	Howard	2010

20CW	2035	W2RBA	559 FL	1795	NJ	Joe	2081	
20CW	2036	AF4LQ	559 FL	1795	KY	Mike	1395	
20CW	2037	VE5VA	599 FL	1795	SK	Pete	46	
20CW	2038	K9IUA	559 FL	1795	ND	Kevin	394	
20CW	2041	K6VNX	559 FL	1795	CA	Arlen	5w	
20CW	2048	VA6RF	559 FL	1795	SK	Earl	1076	
20CW	2052	N5GLQ	559 FL	1795	LA	Dave	5W	
20CW	2053	N3WT	559 FL	1795	MD	John	4	
20CW	2054	N1FN	559 FL	1795	CO	ET	1212	QSY to
his freq.								
20CW	2100	KD5CMN	559 FL	1795	TX	John	1327	
20CW	2104	N9SE	559 FL	1795	IN	Mike	1W	
20CW	2106	WA4QDM	559 FL	1795	VA	Marty	5W	
20CW	2107	NK6A	559 FL	1795	CA	John	153	
20CW	2108	AE2T	559 FL	1795	NY	Al	1664	
20CW	2113	VE7SL	559 FL	1795	BC	Steve	769	
20CW	2114	N0RC	559 FL	1795	CO	Rod	4	
20CW	2116	K5OI	559 FL	1795	NM	Tim	73	
20CW	2117	NU0V	559 FL	1795	IA	John	274	
20CW	2120	N0UR	559 FL	1795	MN	Jim	799	
20CW	2122	K7TQ	559 FL	1795	ID	Randy	102	
20CW	2122	WJ1R	559 FL	1795	CO	Larry	2137	
20CW	2126	NW7DX	559 FL	1795	WA	Ben	1892	
20CW	2128	W0HEP	559 FL	1795	CO	Rich	1817	
20CW	2134	KB1ENS	559 FL	1795	CT	John	2150	
20CW	2136	AF4PS	559 FL	1795	FL	Mac	704	
20CW	2140	W6BAB	559 FL	1795	CA	Harvey	5W	
20CW	2142	W0JOE	559 FL	1795	MO	Joe	1091	
20CW	2146	KQ5U	559 FL	1795	TX	Terry	1603	
20CW	2147	N10DL	559 FL	1795	NH	Aron	3434	
20CW	2150	W4EN	559 FL	1795	NJ	Ed	2216	
20CW	2153	AE9F	559 FL	1795	CA	Dan	5W	
20CW	2155	AA7EQ	559 FL	1795	AZ	Bob	2186	
20CW	2157	N6WG	559 FL	1795	CA	Bob	26	
20CW	2159	N1FN	559 FL	1795	CO	ET	1212	QSY
again...was not								
20CW	xxxx	AJ4Y/fox	xxxxxxxxxxxxxx		FL	Paul	1795	sure
about the first qso.								

Date: Mon, 04 Sep 2000 16:23:49 -0600
 From: Larry East <w1hue@amsat.org>
 To: qrp-l@lehigh.edu
 Subject: [78765] Wanted - W9GR DSP III
 Message-ID: <3.0.5.32.20000904162349.00992280@mail.ida.net>
 Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Anyone happen to have a W9GR DSP III filter that they are willing to part with? An unbuilt kit would be great, but a finished unit also considered. Reply off-line, please.

72, Larry W1HUE/7

Date: Mon, 04 Sep 2000 16:47:48 -0600
From: Larry East <w1hue@amsat.org>
To: qrp-l@lehigh.edu
Subject: [78766] (OT) Wanted -- MMX CPU
Message-ID: <3.0.5.32.20000904164748.009bfd0@mail.ida.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Need a 233MHz Pentium MMX CPU. If you have one for sale, please reply off-line.

72, Larry W1HUE/7

End of QRP-L Digest 1934

